

PROPOSAL/ENVIRONMENTAL ASSESSMENT  
RIVER USE MANAGEMENT PLAN  
OCTOBER 1982

**BUFFALO NATIONAL RIVER, ARKANSAS**




Proposal/Environmental Assessment  
River Use Management Plan  
Supplement to the 1975 Master Plan  
Buffalo National River, Arkansas

Prepared by

Buffalo National River and  
Southwest Regional Office  
National Park Service

1982



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## PROLOGUE

The quality of the resources--the clarity and purity of the water, the clean air, the forests and meadows only gently touched by the hand of man--makes the Buffalo National River a special place to visit. An important aspect of the Buffalo's quality is variety, not only in the landscape, geological features, and plant and animal life, but also in the character of the river itself, which ranges from white water rushing by steep bluffs to broad tranquil expanses flowing through meadows and forested hills.

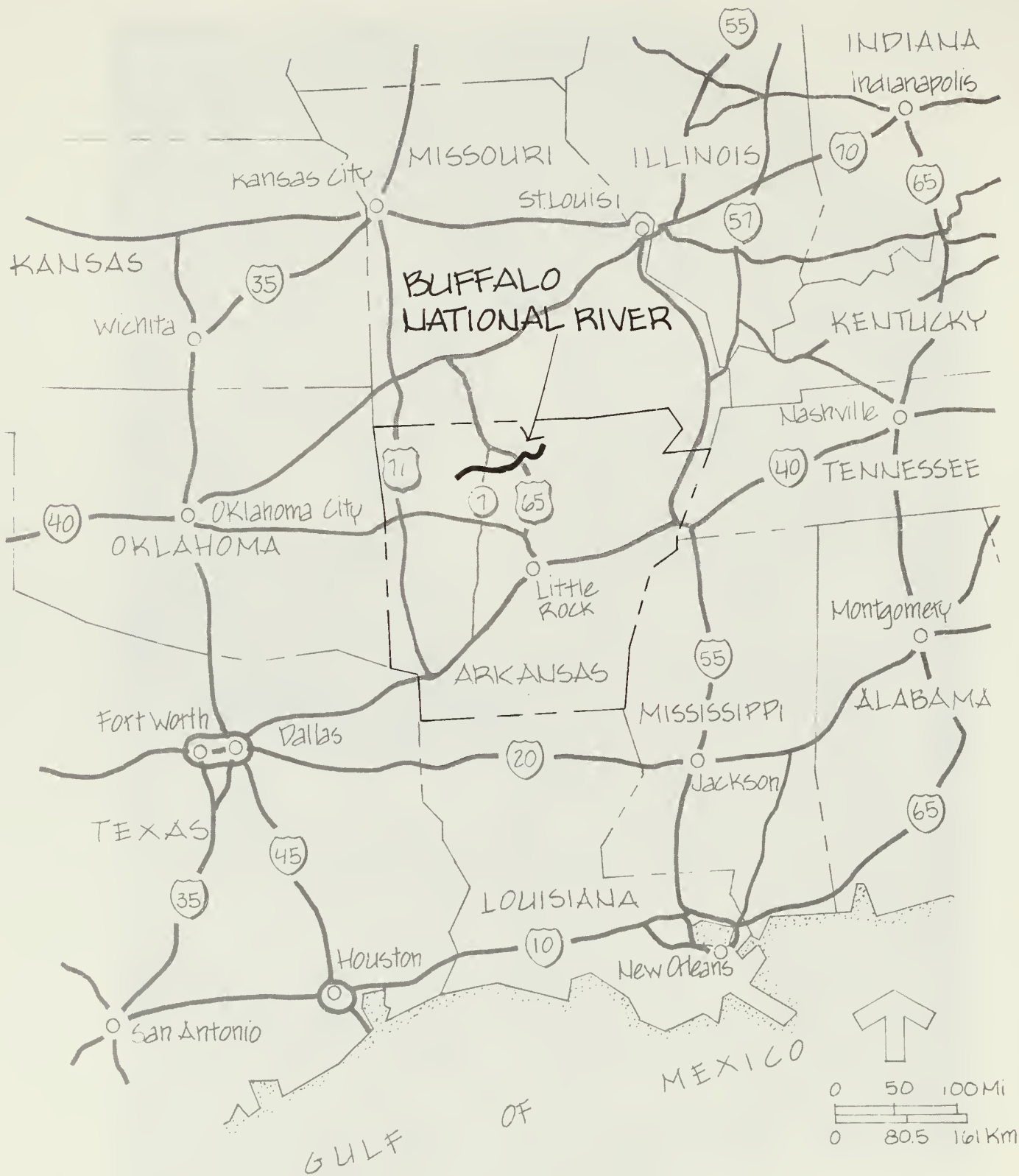
As varied as the river itself are the people who come to enjoy it: families passing through who are experiencing the river for the first time; long-term residents of the area carrying on their traditional uses of the river, including fishing, swimming, hunting, floating, and large family picnics; individuals seeking a challenging canoeing experience or a few days of solitude; and groups of college students "cutting loose" after a long winter of classes and exams. The Buffalo National River serves people of all ages, backgrounds, interests, and needs; however, as the river becomes increasingly popular, conflicts arise, and the very qualities that brought the visitors to the river in the first place begin to be threatened.

"I recently had the pleasure of taking a canoe trip on the Buffalo with my wife and friends. I work as a psychiatrist in an inner-city area in Chicago and desperately needed an opportunity to get away from the pressures of my work. I was amazed at the beauty of the scenery and at how rapidly it was possible to relax and to forget about the trials and tribulations I've been encountering. Having canoed and camped all over the middle west, I'm grateful for the fact that there are still rivers like the Buffalo.

In trying to describe the Buffalo's beauty to friends, I oftentimes find myself at a loss for words. It is a wonderful thought to know that on 'God's Great Earth' there are still places as peaceful and beautiful as this River."







# region

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## BACKGROUND AND PROBLEM STATEMENT

The Buffalo River's outstanding scenic and recreational resources were recognized as early as 1935, when the Buffalo River State Park was established. However, despite subsequent proposals to dam the river and even flood the park itself, little land was set aside to preserve the natural and recreational qualities of the river.

In the late 1950s and in the 1960s, as water-resource developments progressed, people realized that places like the Buffalo River were becoming more and more scarce, and support for the preservation of the Buffalo River grew. In 1972, Congress passed Public Law 92-237 establishing the Buffalo National River for the following purpose:

... conserving and interpreting an area containing unique scenic and scientific features, and preserving as a free-flowing stream an important segment of the Buffalo River in Arkansas for the benefit and enjoyment of present and future generations.

This legislation also required that lands suitable for wilderness be studied. The result was Public Law 95-625 (November 10, 1978) which designated three wilderness areas to be administered in accordance with the Wilderness Act of 1964.

In 1975, a master plan for the Buffalo National River was approved. In addition to brief descriptions of the purpose of the park, its environmental setting, and land classification, this document provided a visitor use plan and concepts for developing and managing the area for the public. The theme of maintaining the "naturalness of the area while assuring the finest quality in recreational experience," was followed throughout the document. Subsequent to the master plan, development concept plans for proposed recreation facilities at Pruitt, Tyler Bend, and Buffalo Point were prepared and approved. This river use management plan is a continuation of these planning efforts.

Use of the river has increased over the years as a result of publicity about the area (generally distributed by word of mouth), quality canoe and johnboat concession operations, and additional and improved access points. This increase in popularity has not been without its problems. Congestion at some river access points and campgrounds has often created conflicts between river users, lessened the quality of the experience for some, and at times damaged the resource. Inappropriate use of some areas for access to the river has also resulted in resource damage.

This river use management plan discusses the existing problems associated with congestion and intensive use, recognizing that the quality of the visitor's experience diminishes and that the resource suffers damage as use of the river increases. Obtaining an acceptable mix between use of the river and preservation of the qualities for which the river has been recognized, both by the general public and by Congress, is the main thrust of this planning effort.

The first section of this document describes and analyzes present use of the river. The second section defines the quality experience desired for each river section and provides a proposal and an alternative to that proposal which would achieve management's goal of properly serving the public while protecting the environment. A "no action" alternative, i.e., maintaining the status quo, is also discussed. The third section addresses the impacts that can be expected with implementation of the proposal or either of the alternatives.

## SUMMARY OF ALTERNATIVES

### MANAGEMENT GOALS

Manage the river to maintain a free-flowing nonpolluted stream, to preserve the natural and pastoral river scene, and to minimize environmental impacts caused by development and visitor use.

Make available a full spectrum of high quality recreation experiences compatible with the river resources. The Buffalo River may be experienced at three levels: (1) in a near-wilderness or natural environment with no facilities and low visitation; (2) in a near-natural environment with limited facilities and moderate visitation; and (3) in an outdoor setting with developed facilities and high visitation.

### I. PROPOSAL

#### Floating

For each river section, two maximum levels of use (or carrying capacities) will be established--one for weekends and another for weekdays. The maximum level of use will be above the use recorded in 1981, on all river sections, except for the Ponca/Steel Creek to Pruitt sections on weekends, where the level will be at the 1981 level, and the Carver to Mt. Hersey section on weekends, where the level will be slightly below the 1981 recorded attendance. Managing visitor use within the carrying capacity will be accomplished by:

- A. As the first and primary method of controlling river use, the current allocation under concession permits of 1,250 canoes by district and 110 johnboats will continue.
- B. The public will be informed through pamphlets, the concessioners, and park information stations about experiences available on the different river sections at different periods of the week and season and on proper use of the park. The news media -- including newspapers, magazines, radio, and television--will also be utilized.
- C. Access points and recreation facilities will be improved where appropriate.
- D. Enforcement of park regulations will increase in order to reduce conflicts between park visitors.
- E. Visitor surveys of floater perceptions, recording of attendance data, and monitoring of impacts on the river environment so that management can adjust canoe use levels as needed to protect the resource and provide a quality recreational experience for the public, will occur annually.

If it is determined that current use of a river section is adversely affecting the environment or diminishing the quality of the river experience or that the maximum level of use is exceeded 2-3 times in one year, concessioners will be required to distribute their put-ins to more than one location and/or stagger their put-in times, and/or private boaters will use a permit system for certain sections of the river during heavy use periods.

#### Camping

Visitors will continue to be permitted to camp at designated sites and on gravel bars and river banks. To relieve congestion, visitors will be encouraged to camp at sites other than Kyles Landing. Commercial johnboat outfitters operating on the White River without a concession permit will be allowed to camp up to the lower end of Hudson Bar, a distance of approximately 1½ miles from the mouth of the Buffalo, if they obtain an annual commercial use license.

#### Fishing

Fishing activities and programs will continue as in the past. Impacts on the fishery will be monitored annually.

#### River Access

Criteria will be utilized in assessing the appropriateness of and need for low use access sites.

## II. ALTERNATIVE I (No Action)

### Floating

The current allocation under concession permits of 1,250 canoes by district and 110 johnboats will continue. Private use would remain uncontrolled.

### Camping

Same as the proposal, except only johnboat outfitters that have concession permits will be permitted to camp on the Buffalo River.

### Fishing

Same as proposal.

### River Access

The present policy of permitting vehicular access to numerous formal and informal river access sites will continue. Closures of low use access sites would be implemented only occasionally, after evidence of significant environmental damage or conflict. No standardized criteria would be established.

## III. ALTERNATIVE II

### Floating

As in the proposal, two maximum levels of use will be established for each river section -- one for weekends and another for weekdays. The maximum levels of use are identical to the proposal, except significant reductions in use on weekends will be required from Ponca/Steel Creek to Pruitt, and from Maumee to Rush. Managing visitor use within the carrying capacity will be accomplished through implementation of items A, B, C, D, and E under the proposal. Restrictions on concession and privately obtained canoes as discussed in the proposal would be implemented immediately on these river sections.

### Camping

Same as alternative I.

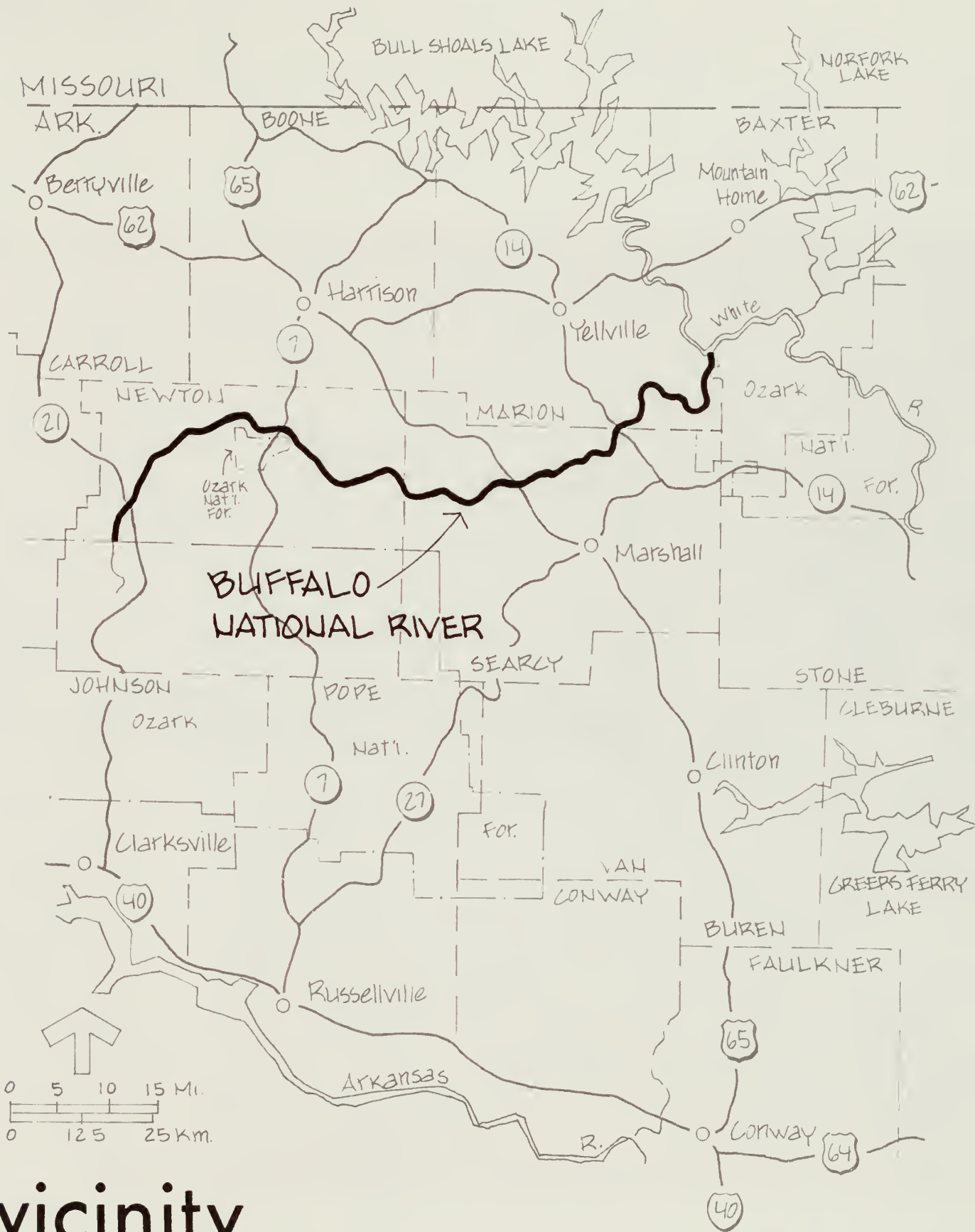
### Fishing

Same as proposal.

### River Access

Same as proposal.





# vicinity

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"Its fun to canoe with others. We traveled together, a half dozen canoes strung out in procession, all in sight of one another through the lengthy pools, lost from sight when rounding the bends and sweeping down the chutes."





RIVER USE



## FLOATING

### Introduction

As the following figures show, canoeing on the Buffalo has been an increasingly popular activity over the years:

1963	5,400
1977	29,410
1978	34,304
1979	46,300
1980	45,700
1981	51,300

Since almost all of the canoes carry two passengers, the estimated number of canoeists would be twice these figures. The drop in use during 1980 is likely due to drought and low water levels. Conversely, the high use reported in 1981 is due in part to good weather and water conditions.

The Buffalo National River is divided into three management districts--the Pruitt District (upper section), the Silver Hill District (middle section), and the Buffalo District (lower section). Canoeing is primarily concentrated in parts of two of these districts--the Pruitt District and the Buffalo District--with most of this use on weekends.

### Concessions

Although the Buffalo National River was authorized in 1972, privately operated canoe rental and shuttle concessions were not regulated under the National Park Service permit system until the 1980 season. Beginning in 1978, interested parties were requested to make offers for the operation of canoe and johnboat rental services. After considerable analysis and deliberation, permits for a three-year period were issued involving a total of 1,250 canoes to 24 individuals or companies. Distribution was as follows:

	Concessioners	Canoes
Pruitt District (upper section)	10	450
Silver Hill District (middle section)	7	300
Buffalo District (lower section)	7	500

Canoes were distributed by management district to avoid congestion on the river and minimize the impact on the environment. Concessioners must either put-in or take-out in their own district, except when renting canoes for trips of four days or longer. Restrictions on concession canoes involves only the number of canoes and access to the river, not numbers of people served or numbers of trips per day. The number of concessioners operating at the Buffalo National River has decreased due to the sale of several concession operations; however, the number of canoes has remained the same. In addition, 110 johnboats were allocated to eight individuals or companies, with no restrictions as to district boundaries.

## **Pruitt District**

The stretch of river above Ponca is usually floatable only when the river is in flood stage downstream, and then only by experienced canoeists. Because of the high risks of this float, few concessioners rent canoes for this stretch. The extreme upper sections of this part of the river are within the Upper Buffalo Wilderness. The portion from Boxley to Ponca flows through the scenic Boxley Valley with small bluffs on one side and a pastoral valley on the other.

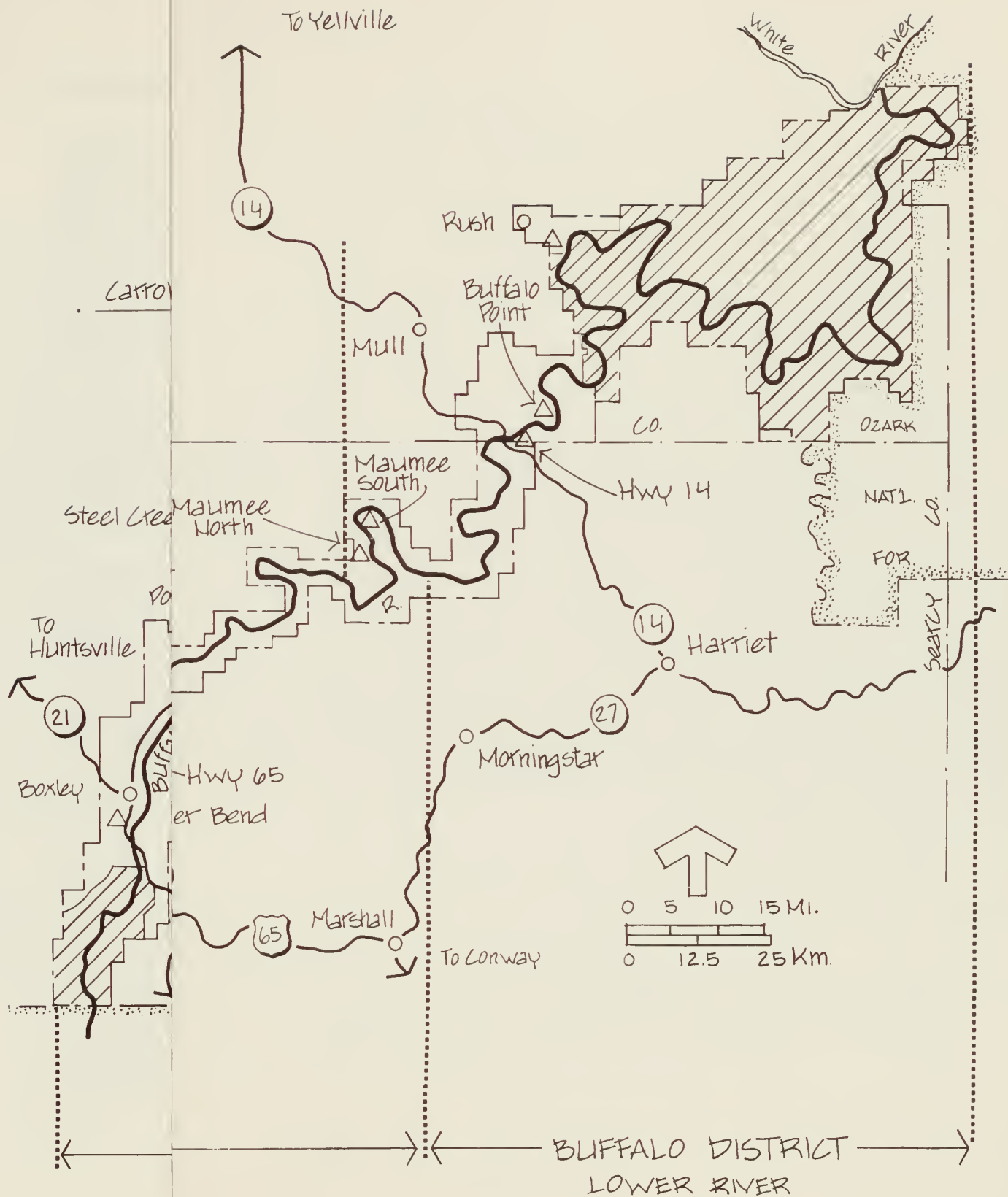
The next section of river, Ponca/Steel Creek to Pruitt, is floatable in the spring, generally until June, with heavy use on weekends during the months of April, May, and June, depending on river conditions. Dropping at a rate of 11 feet per mile, this section offers an exciting fast water run of 24 miles which requires some canoeing skills since there are rocks and boulders as well as willows to dodge on this fast flowing section. The high bluffs and side canyon hikes to Hemmed-In Hollow with its 200-foot waterfall and the scenic Indian Creek Canyon also increase this section's attractiveness to floaters. The first 12 miles of this float are through the Ponca Wilderness. Although the river is part of the designated wilderness, recreation is recognized as a traditional and acceptable use.

On peak weekend days, canoeists on this stretch of the river are seldom out of sight of other floaters, and on narrow chutes through rapids and at some bends, canoes must wait their turn or risk interfering with one another. The take-out at Kyles Landing following a busy float results in a large number of canoeists camping in a small area. The close camping arrangements and the party atmosphere often lead to conflicts between park visitors, although many campers use these areas because of this atmosphere. High concentrations of recreationists in popular areas also cause trampling of vegetation, littering, streambank erosion, and unsanitary waste disposal.

## **Silver Hill District**

The river in the Silver Hill District is floatable year-round except for a stretch of up to 4.5 miles below Woolum that goes completely dry beginning usually in mid-July. In the lower section during the summer, it may be necessary to drag canoes over shallow shoals. The gradient of the river varies from 6 feet per mile between Carver and Woolum to 3 feet per mile between Gilbert and Maumee. Canoe use in the Silver Hill District is light, seldom exceeding ten canoes per mile. The stretch from Carver to Gilbert--which passes through an area marked by large, wide fields, small bluffs, and agricultural scenes--is busiest from April to June. From Gilbert to Maumee, the four busiest months are May, June, July, and August.





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## Buffalo District

The river becomes wider in this district with numerous high bluffs, timbered land, and open fields. The two most heavily used stretches of the Buffalo National River--from Maumee to Buffalo Point and from Buffalo Point to Rush--are in this district. Buffalo Point, a popular recreation area, contains campgrounds, picnic areas, a swimming beach, cabins, food service, and interpretive programs.

Concentrated use occurs from May to August with extensive, but less, use in April and September. Weekend use far exceeds that on weekdays. On busy weekends, canoes from Maumee to Rush are seldom out of sight of other canoes. At Rush Landing, there may be so many canoeists taking out that some must delay landing until earlier arrivals have beached their canoes and loaded them on vehicles.

The final leg of the river is a 24½-mile float, which passes through the Lower Buffalo Wilderness, to the confluence with the White River. (The Buffalo River was excepted from the designated wilderness because of the historic use of motorized craft.) This stretch receives limited use, mainly because it requires a two-day float. The trip to Buffalo City or Norfolk requires a three-hour round trip for a shuttle (delivery and pickup service provided by concessioners).

Johnboating is also an important recreational activity, especially in the Buffalo District, where the vast majority of this use occurs between Rush Landing and the White River. Although data on the extent of johnboat use are limited, it is estimated that there are approximately two johnboats for every one canoe on this stretch of the river. Present levels of johnboat use are not causing management problems at this time. The low numbers, the 10-horsepower limitation on motors, and the prohibition of all motors above Erbie serve to mitigate any adverse effects of johnboat use.

## Statistics

Statistics on canoe use are displayed in graphic form in Appendix A. Analysis of this data indicates that the vast majority of use occurs on four river sections: Ponca/Steel Creek to Kyles Landing, Kyles Landing to Pruitt, Maumee to Buffalo Point, and Buffalo Point to Rush (Chart 5). Use of the river is largely determined by weather and water conditions, with a short season on the upper river and a longer one on the lower river. Most use occurs on Saturdays and Sundays, except for the very upper and lower ends of the river where use is limited (Chart 6). Information is also included on peak use days for the various river stretches (Chart 7); canoe densities, i.e., the number of canoes per river mile in each section of the river (Table I); and the percent of canoes provided by concessioners versus those brought to the river by recreationists (Chart 8).





High weekend use at Gray Rock above Kyles Landing.



## Visitor Perceptions

Statistical data is required to give an indication of how much the river is used; however, it does not reflect the effects on the visitor. To assist the National Park Service in assessing these impacts and provide insights that would aid in the management of the river, a two-year river recreation study was conducted by Dr. Robert B. Ditton, Department of Recreation and Parks, Texas Agricultural Experiment Station, Texas A&M University.

The lower river from Maumee to Buffalo Point and from Buffalo Point to Rush was studied during the canoeing season in 1979. During the second year of study, 1980, research was directed at the upper river, including the following sections: Ponca-Kyles Landing, Kyles Landing-Pruitt, and Pruitt-Hasty. Funding has not been available to study the middle section of the river.

An essential part of the study presented the perceptions and attitudes of visitors regarding crowding as it impacted their experience on the river. Of those responding in the Ditton study of the upper river on Saturdays and Sundays during the peak season, 46.5 percent expressed the feeling that their enjoyment of the trip was reduced to some degree because of crowded conditions. Conversely, 53.5 percent of the respondents either felt that the crowds had no effect or actually increased their enjoyment. The group of 46.5 percent are subsequently referred to as the crowded respondents, while the 53.5 percent are referred to as the non-crowded respondents

<u>RESPONSE</u>	<u>UPPER RIVER</u>		<u>LOWER RIVER</u>	
	Number Respondents	%	Number Respondents	%
Greatly Reduced	35	8.5	8	2.2
Moderately Reduced	49	11.9	30	8.2
Slightly Reduced	108	26.1	62	16.8
Not at All	128	31.0	163	44.3
Slightly Increased	36	8.7	45	12.2
Moderately Increased	28	6.8	35	9.5
Greatly Increased	29	7.0	25	6.8
TOTAL	413	100.0	368	100.0

A further analysis of the above chart indicates that 20.4 percent responded that their enjoyment of the trip was reduced moderately or greatly in the upper section, while 10.4 percent reported the same experience for the lower section.

On most variables such as gender, age, income, marital status, and residence, there was no difference between crowded and non-crowded respondents. However, the crowded respondents as a group were significantly higher in educational level as well as number of years floating rivers, number of trips per year, and number of years floating the Buffalo.

When attempting to further understand the visitors, it was found that the overwhelming majority--87 percent of the crowded respondents--were on the river either Saturday or Sunday; 76 percent of the non-crowded respondents were Saturday or Sunday visitors. Also, a larger percentage of crowded (80 percent) versus non-crowded (69 percent) respondents were campers. Of those who took out early, between 12:00 and 1:00 p.m., fully 70 percent indicated they were crowded. This may indicate that those who were most negatively impacted by the crowding were more likely to take out early. Of course, the study could not include potential visitors who stayed home to avoid the crowds.

As might be expected, the crowded respondents' motives for taking a trip were somewhat different from those of the non-crowded respondents. The crowded respondents rated more highly a desire to escape every day pressures and seek peace and calm. The non-crowded respondents placed less importance on a natural experience and were more interested in social contact.

Overall satisfaction levels of both groups were relatively high; however, the non-crowded group did indicate a significantly higher level of satisfaction. The respondents indicated overwhelmingly that they were pleased with the job being done by the park managers and that they thought the river and its surroundings were in good condition. Also, the respondents indicated their support for restrictions on river use when necessary to avoid environmental damage or crowding. Approximately 80 percent desired some control on use, with more support for high restrictions on river use among the weekend visitors. The ratio of those in favor of high restrictions to those in favor of low restrictions was approximately two to one on the weekends, while for weekday visitors, the ratio was reversed.

When comparing the upper and lower river sections, it was found that 43 percent of the upper river respondents indicated that the crowds negatively impacted their experience, while only 22 percent of the lower river group expressed this sentiment. Looking only at Saturday and Sunday users, 47 percent on the upper Buffalo River and 27 percent on the lower river were negatively impacted by the crowds. The upper river visitors felt significantly more crowded at the put-in points than did those on the lower river.

On the upper river, the highest percentage of crowded respondents occurred when 126-150 canoes were recorded on a particular river section. Beyond this level, there was a slight drop in the crowded percentage. This could indicate that beyond a certain level those who are most likely to be negatively impacted by crowding are finding other places for their activity. The Ditton study did not investigate the level of displacement that has taken place over the years at the Buffalo.

A comparison of 1981 canoe use levels with the levels when the Ditton studies were accomplished (1979-1980) indicates that canoe use on the lower river in 1981 was 17 percent higher than the use recorded in 1979. On the upper river, use recorded in 1981 was 3 percent higher than in 1980.

In conclusion, the Ditton research indicated that while both the upper and lower river users were generally satisfied with their experience, those on the upper river, especially on weekends, were negatively impacted by the crowds. Furthermore, respondents were less satisfied with the management of the upper river than the lower river.

"For a while we sat around the fire and continued talking. As it grew darker we heard the intermittent chirping of cricket frogs, and the long drawn out trills of tree frogs. And before long, other noises of the night: A cowbell, tinkling in the distance. Background music of crickets, with bass notes from a bullfrog down the river. Now and then the tremulous wailing of a screech owl in the woods behind our camp. At half a dozen points out in the blackness, whip-poor-wills began calling, repeating their three syllables endlessly. Their southern relations, the chuck-will's-widows, soon chimed in, and their chorus was to continue far into the night. Evening sounds on the river had a lulling effect. Long before our normal bedtimes, we turned in."





CAMPING



## **CAMPING**

### **Introduction**

Camping on the Buffalo National River provides the visitor with a wide range of experiences. There are designated camping areas both primitive and developed, and there are also opportunities for camping on gravel bars and river banks.

### **Gravel Bar and Riverbank Camping**

By camping on gravel bars and riverbanks, the visitor can have a near-wilderness experience with comparatively few or no other people. Since there are neither facilities nor services, including visitor protection, this kind of camping demands camping skills, and the visitor must assume some risks.

### **Primitive Camping Areas**

The 1975 master plan provided for primitive camping areas 8-12 miles apart (primarily to coincide with a leisurely one-day float) where roads cross the river or where existing roads provide access. Primitive camping areas are not provided in the Lower Buffalo Wilderness. Facilities are minimal: access roads and parking areas, basic sanitary facilities, possibly a source of potable water, a limited number of fire grates, and perhaps a limited number of tables. These locations are either above the floodplain or are capable of withstanding occasional flooding. The number of people using these areas at a given time varies from low to high.

### **Developed Camping Areas**

Developed areas like Buffalo Point have extensive facilities and services, interpretive programs, and a high level of interaction between campers. Facilities are either above the flood plain or are capable of withstanding occasional flooding. Visitation is usually high.

There are advantages to both the visitor and to park management of having designated campsites (primitive or developed):

#### **I. Visitor Safety**

Prior to and following the authorization of the Buffalo National River, historical uses of the river and surrounding land have been--in addition to camping--canoeing, johnboating, fishing, picnicking, swimming, and hiking. Most of these activities must occur on or in close proximity to water, and therefore flood hazards exist. Because of the nature of the resource, park visitors must assume some risk and liability.

At present, precautionary safety procedures include posting of standard flood hazard warnings at the various river access sites and warnings at access sites during high water periods that only experienced canoeists and boaters should use the river or that the river is closed to all uses. In addition, rangers attempt to warn campers of flood hazards by going to designated areas. Visitors camping on gravel bars and other undesignated sites are difficult to reach and will not be warned of impending danger. Other safety measures include daily information and





High weekend use at Kyles Landing.



flood warnings provided by the U.S. National Weather Service to radio and television stations and newspapers. Canoe and johnboat concessioners also warn park visitors of high water conditions. It is understood that some river users will not be warned of impending floods.

Future precautionary measures include information on flood hazards in park brochures and other publications and the installation of flood alarm gauges for early warnings. Further measures will be based on annual assessments of flood hazards and safety procedures and the results of a floodplain study tentatively scheduled for 1983.

Another safety factor involves the possibility of disease transmitted through contaminated river water or water from springs. Eventually, all designated camp sites will have safe drinking water.

## 2. Resource Protection

Visitors camped on gravel bars and river banks do not have sanitary facilities available and must be relied upon to properly dispose of human waste. At low levels of use, properly disposed human waste is not an environmental problem. As visitor use rises, unsanitary and unhealthy conditions can become prevalent, especially at popular sites.

## 3. Management

Important visitor services can be more easily provided at designated areas. Vault toilets are installed and pumped regularly to remove human waste. Trash is picked up, and potable water will eventually be available at all areas. Visitors may also enjoy interpretive services. Maintenance, resource management, and law enforcement efforts can be concentrated at a few accessible sites instead of numerous, often inaccessible camping locations spread out over the length of the river. Isolated campers will not receive these services.

Prohibiting camping on gravel bars is not considered practical because of the nature of the resource, the historical use and popularity of this activity, and the apparent lack of environmental damage resulting from such use. Also, some designated camping areas could not handle these additional campers. To further protect the canoeists and johnboaters who camp, undeveloped camping areas between existing designated areas and above the floodway might be designated. This approach is considered impractical, however, because of the distance of some potential sites from the river; natural obstacles making access difficult; the need for considerable signing which would be expensive to install, maintain, and replace due to vandalism and flooding; and high management costs in providing even minimal maintenance of the site. The placement of warning signs at all areas subject to flash flooding is also considered impractical. The installation of signs along the entire river corridor would be very costly and create a visual intrusion on the natural environment. Current gravel bar and river bank camping does not appear to be detrimental to the environment at this time nor are adverse impacts to floodplain or wetland values anticipated.

## Use Levels

As the extent of canoeing and johnboating and the experience offered to boaters varies from river section to river section, so does camping. The upper river

contains several designated and developed camping areas that primarily serve canoeists. They are Steel Creek, Kyles Landing, Ozark, and the recently opened Erbie. To a limited degree, the Lost Valley camping area, over a mile from the river, is used on weekends during the spring by floaters who sometimes camp the night before their float trip. According to the Ditton Study of 1980, 73 percent of all canoeists surveyed in the upper river also camped, and of this number approximately 67 percent camped at the designated sites identified above. The remaining 33 percent camped at undesignated areas, i.e., on gravel bars and river banks. The most heavily used area is Kyles Landing, which accommodated approximately 48 percent of all campers.

There is considerably less canoe use on the middle river and therefore less camping. Also, it is believed that the percent of one-day trips is higher in this section of the river than the upper river. Although no camping areas have been officially developed in the middle river, the master plan provides for limited development at several sites, with major development at Tyler Bend. All of these sites are presently used to varying degrees by canoeists and others for camping. As the river proceeds downstream, it widens and offers larger gravel bars for camping and other activities. Survey data on the extent of camping is not available for the middle river.

As in the upper river, the lower river receives extensive canoe use. However, according to the Ditton study of 1979, approximately 49 percent of canoeists between Gilbert and Rush camped, compared to 73 percent in the upper river. Approximately 70 percent of the camping occurred at the extensively developed campgrounds at Buffalo Point, with limited use of the primitive facilities at Rush. The numerous large gravel bars were also used.

## Density

Many factors influence the quality of a campsite and a camping experience: the physical setting, the relationship of the campsite to the recreational resource, the design, the availability and accessibility of sanitary facilities and drinking water, and proximity of the campsites to one another. This last factor is called density and can be quantified as the number of campsites or camping units per acre. Density figures enable management to look at existing or proposed areas and estimate the number of camping units that area will support.

The Buffalo Point campground contains 118 campsites. The total acreage of the campground--including support facilities such as roads, trails, pavilions, parking lots, drainages, and a visitor contact station--is approximately 30 . Therefore, the density of the Buffalo Point campground is about 4 campsites per acre ( $118 \div 30 = 3.9$ ), a useful standard density for the Buffalo National River. A lower density level is desirable for some primitive camping areas; however, the 4 campsites per acre provides a general guide in campground planning and design.

## Campground Capacities

Except for the Ditton studies mentioned above and attendance figures for the Buffalo Point campground, data on the extent of camping are very limited. However, based on the available information, canoe use figures for the 1981





Lack of consideration for others and the environment causes problems.



season, and the standard density calculation mentioned above, visitor use of campsites and site capacities can be analyzed. Kyles Landing is a 10-acre camping area. By using the camping density level of 4 sites per acre and assuming 4 individuals per site, the maximum level of use at Kyles Landing should be 160 campers ( $4 \text{ sites} \times 4 \text{ individuals} \times 10 \text{ acres} = 160 \text{ campers}$ ). On the most heavily used stretch of the river, Ponca/Steel Creek to Kyles Landing, Ditton reported that 73 percent of the canoeists camped, and of this number, 48 percent camped at Kyles Landing. As an example, when 455 canoeists float this section of the river, it can be estimated that 73 percent or 332 will camp, and of this number approximately 48 percent or 159 individuals will camp at Kyles Landing. By referring to Chart 7 in Appendix A, it can be shown that the desired level of use, 160 campers, was exceeded twice during 1981. Twelve additional campsites are now available at the recently opened Erbie, which is 5 miles downstream of Kyles Landing.

This method of analysis was applied to other campsites developed or proposed to be developed in the master plan and development concept plans. Although the percent of canoeists camping at Kyles Landing is considerably higher than those camping at other sites, the 48 percent figure was used. The results indicate that with the exception of Kyles Landing and Erbie the areas are sufficient. More specific information is available in Appendix B.

On the lower river from Maumee to Rush, most camping activity is centered around the recreation facilities at Buffalo Point. Because of the extensive use of Buffalo Point, the number of canoes recorded on the second highest day of use in 1981 for the two river sections from Maumee to Rush were combined for a total of 634 canoes or 1,268 canoeists. Using Ditton's findings, 49 percent of the canoeists, 621 individuals, camped, and of this number 70 percent or 435 camped at Buffalo Point. Figuring a camping density of 4 persons per site multiplied by the 118 sites at Buffalo Point, 472 individuals may be accommodated. It should be noted, however, that not all of the campers at this site are canoeists. Crowding along the lower river is not as serious a problem as on the upper river because canoeists can use other sites such as Maumee-South and Rush as well as numerous gravel bars. However, the demand in this part of the river for developed camping facilities exceeds supply. Camping facilities planned for the Highway 14 Bridge area will significantly increase camping opportunities within 3 miles of Buffalo Point.

The extent of canoeing and johnboating below Rush to the White River, a distance of over 24 miles, is low and plenty of opportunities for camping are available on the many gravel bars. However, some commercial johnboat outfitters operating on the White River who do not have National Park Service concession permits are using gravel bars on the lower Buffalo for camping. This conflicts at times with the use of these same gravel bars by Buffalo River canoeists and park johnboat concessioners.

"One day in May I went floating with Jack in a johnboat. We fell into a sort of routine. . . casting, idly reeling in the lure, casting again as we slowly drifted down the pools, following the bank on the deep side . . . suddenly, the rod twitched bent toward the water, the reel whirred as line whipped out, the brownie surfaced in a fury of splashing . . . I caught a smallmouth! . . . We pulled in for lunch at the mouth of Tomahawk Creek. Who can imagine anything better than a fillet of Buffalo River bass."





FISHING





## FISHING

### Introduction

The Buffalo National River has a national reputation as a smallmouth bass stream. Ozark rock bass, longear sunfish, green sunfish, channel catfish, flathead catfish, occasionally largemouth and spotted bass are also caught. Fishing is probably, along with swimming, the oldest recreational use of the river. Fishermen may use canoes and johnboats for access to their favorite pools, or they may wade or fish from the banks.

Although fishing is a year-round activity, spring is the most popular season. During the summer when the temperature of the river rises and the water becomes extremely clear, fishing use declines during the daytime, but fishermen can still be successful by fishing during the early morning and late evening hours and especially at night for bass and catfish.

### Use Levels

Although it is difficult to count fishermen, who utilize numerous access points to reach favorite fishing spots, a rough estimate of 33,000 fishermen has been obtained for 1981 by using the Ditton study--which indicates that 13.5 percent of the canoeists on the lower river had fishing equipment with them--and a partial and incomplete creel census conducted in 1980 and 1981, which indicated that 41 percent of the fishermen were canoeists. Fifty-one percent of these fishermen were local residents.

### Concerns and Research

There is concern by fishermen that the increasing number of canoes is having a harmful impact on the fishing. There are several ways that these impacts could occur: 1) The most obvious impact is on catchability. The disturbance from large numbers of canoes going by could make the fish skittish and less likely to strike at a lure or bait. 2) Large numbers of canoes passing over the nests of bass, rockbass, or sunfish could drive the male fish off the nests causing higher mortality and loss of eggs and young fish due to predation by other small fishes such as minnows, darters, or small sunfishes. Increased predation of this nature was indicated in a Missouri study on longear sunfish. 3) Increased canoes could mean more fishermen and heavier fishing pressure on the bass and rock bass populations, causing the river to be overfished. 4) Solitude is sometimes as important to fishermen as success in catching fish, and large numbers of canoes would diminish the quality of the experience. Fishermen may be constantly questioned by floaters about their fishing success or may have to cast their lures between, in front of, or behind canoe traffic.

Although the results of a research project on smallmouth bass and rock bass in the Buffalo National River are not final, it appears that at existing levels of canoe use overfishing has not occurred. Of 11 sites studied, only 2 showed indications of



overfishing--one on the heavily floated Ponca Steel/Creek to Kyles Landing stretch, the other on the Woolum to Gilbert section. In fact, throughout the river, the number of bass caught per hour was above average for the Ozarks. Although canoe levels affect the catch rate on busy weekends, overall the quality of fishing is still good.

The concern that increased numbers of canoes may cause nest desertion by guarding male bass resulting in higher mortality of eggs and young fry is not supported by recent research on the Buffalo. This is probably because these species of fish nest in deeper water and are less prone to disturbance than the longear sunfish that were studied in Missouri.

The fourth concern, quality of the fishing trip and the pursuit of solitude, is an aspect of fishing that has not been fully researched. However, it is considered as valid a need as preservation of the fishery itself.

In summary, preservation of a quality fishery and fishing experience is an important goal for park management. A fishery research project is underway to gather data for a fishery management plan which will provide additional guidance in managing of recreational opportunities for fishermen as well as canoeists.

"My family just returned from a vacation spent on the Buffalo River, camping, swimming, canoeing and fishing. We found it a completely captivating and beautiful place. Few places have we been where the abundance and balance of wildlife seemed so evident. The air was simply ringing with a variety of bird song.

There was something there for everyone. The river was not so wild or deep that the children could not play in it in comparative safety. The sand bars alternating with pebble beaches was wonderful for sunning or rock collecting. The fishing was marvelous and there was just enough white water to make it exciting for the novice canoeist. Last, but not least, the exquisite beauty of the area was evident in the wooded mountains, the sheer exposed cliffs and the rock formations."





RIVER ACCESS



## RIVER ACCESS

Access to the river for recreational activity usually occurs at access sites which are located at major or minor road crossings and have recreation development ranging from minimal to extensive. These access sites are identified below.

### Pruitt District

Boxley Bridge  
Ponca Bridge  
Steel Creek  
Kyles Landing  
Erbie  
Ozark Campground  
Pruitt-Upper & Lower Areas  
Hasty Launch Area  
Hasty Low Water Bridge  
Carver

### Silver Hill District

Mt. Hersey  
Woolum  
Margaret White  
Baker Ford  
Highway 65  
Gilbert  
Maumee-South

### Buffalo District

Maumee-North  
Highway 14 Bridge  
Buffalo Point Campground  
Rush  
Cedar Creek

In addition to these sites, there are numerous low use, unimproved river access sites throughout the entire river corridor. These sites have poor to extremely poor road conditions, and many are only accessible with four wheel drive vehicles. Use is generally very low, with no recreational facilities.

Some of these sites provide appropriate opportunities for a variety of recreational pursuits. Others, however, are not necessarily serving the needs of the public. Usually created by off-road vehicles, these sites may be relatively new. Although they may be used by only a few individuals for brief periods during the year, this use often results in or has the potential to result in damage to the resource and/or conflict with other park visitors and adjacent land owners. Also, other sites providing identical or similar recreational opportunities may be within a short distance.

The river access sites in designated wilderness areas are being closed as provided for in Public Law 95-625 (subject to any valid existing rights-of-way that landowners hold). Some sites outside of wilderness areas are, however, remaining open with the possibility of further resource damage and conflicts between adjacent landowners and park users.

"I am only sixteen years old but believe me, it is really fun to catch small mouth bass on a fishing rod out of clear running water."





PROPOSAL AND ALTERNATIVES



## **MAJOR MANAGEMENT GOALS**

**Manage the river to maintain a free-flowing nonpolluted stream, to preserve the natural and pastoral river scene, and to minimize environmental impacts caused by development and visitor use.**

**Make available a full spectrum of high quality recreation experiences compatible with the river resources.** Visitors are encouraged to experience the river in close contact: canoeing, camping, fishing, swimming, johnboating, studying aquatic nature, sunning, wading, or just sitting and watching. These recreation activities will be managed to minimize conflicts among users. The Buffalo River may be experienced at three levels:

### **1. In a near-wilderness environment with no facilities and low visitation.**

For some visitors the river is best enjoyed in relative isolation. They want to set their own pace and take their chances with the elements. They have the skills and the equipment to handle the challenges of the river, weather, and unforeseen mishaps as well as the self-reliance demanded by gravel bar and shoreline camping with no facilities. Low levels of use are necessary for this experience to be satisfying.

### **2. In a near-natural environment with limited facilities.**

Canoeing trips of varying lengths will be possible in calm water and whitewater. Designated primitive camping areas at approximately one-day float intervals will have minimal facilities. The visitor experience involves a testing of skills, a taste of adventure, times to be with people, and occasional periods of solitude.

### **3. In an outdoor setting with developed facilities and moderate to high visitation.**

Canoe lessons will be offered for beginners, and both short and day-long canoe trips will be fun and not too difficult. Buffalo Point (now), Tyler Bend (future), and perhaps other campgrounds will offer comfort and convenience. Park interpretive programs will be featured, and the social interaction with other visitors is a rewarding part of the park experience.





## THE PROPOSAL

### FLOATING

#### **Carrying Capacities and Visitor Use Levels**

In determining carrying capacities or acceptable levels of use a number of factors are important: the nature of the resource; the impact of recreational use on the natural environment and on man-made facilities; safety; visitor expectations, preferences, and perceptions of crowding; and the management objective, i.e., the kind of recreational experience desired for the area.

The Buffalo River country has some of the most beautiful scenery in the eastern half of the United States. The scenery and the other natural and historical features of Buffalo National River stir our higher senses and feelings about this unique river valley. River management provides opportunities for the visitor to share activity and discovery with others as well as to be alone with one's own senses. Spontaneous and individual types of experiences such as quiet canoe trips and fishing in the wild are possible. Groups and larger numbers of people also enjoy experiencing scenic beauty and the joy of floating with others on a Sunday afternoon. Whether alone or with a group, the emphasis is on experiencing the superlative resources--the river, the land forms, the history, the wildlife--in close contact.

Management of visitor use could be approached in a number of ways such as (a) allowing use to rise to the maximum extent possible, (b) restricting use to a "wilderness experience" at all times, or (c) combinations in between.

Excessively large numbers of people will destroy the very qualities which the Buffalo National River was established to protect. Crowding will cause environmental damage, increase accidents on the river, and diminish opportunities for visitors to set their own pace and enjoy the unique beauty of the river valley. Urban densities may be acceptable in some recreational settings, but not along the Buffalo.

Conversely, it is not realistic to plan for a pure wilderness experience along the river. In years to come hikers may enjoy a few days in one of the Buffalo's wilderness areas with "outstanding opportunities for solitude," but such an experience for a canoeist has been essentially lost by the existing developments along the river, the road crossings, the established motor boat use (with 10 hp limitations) in the lower river, and the relatively fast trip and moderately high numbers of people on the upper river in the spring.

This plan proposes to provide visitors with a full spectrum of choices for high quality recreation experiences, ranging from near-wilderness with few people (low use), to near-natural with some people (moderate use), to relatively higher densities (high use).

It is realistic to plan for a near-wilderness or remote area experience. By choosing the right section of the river on the right day and at the right time of day, visitors can enjoy the river virtually all to themselves. The National Park Service intends to manage the river in such a way that this remote area experience is always available for the visitor who will make advance plans. At present, people who put in just as the sun comes up or wait until early afternoon to launch generally avoid

other floaters. Even on those sections of the river designated for moderate or high use, it appears that for the foreseeable future, floaters and fishermen seeking this kind of experience can use these sections frequently in the fall and winter and on weekdays in the spring and summer by coming very early or late in the day.

This plan proposes the establishment of maximum levels of use (carrying capacities) for each river section; these levels are described as low, moderate, or high:

**Low (up to 8 canoes and johnboats per mile):** Floaters and campers may experience the quiet solitude of the river, encountering relatively few other floaters, if any. Fishing opportunities are good.

**Moderate (between 9 and 20 boats per mile):** Floaters and campers may encounter other people, but delays at launch sites and extensive use of designated camping areas would occur only rarely. Fishing opportunities are fair.

**High (over 20 boats per mile):** Many other floaters may be encountered, most of whom will be in groups of seven or more. Use of some designated camping areas will often approach capacity. Delays at launch sites or rapids can be expected to occur on Saturdays and Sundays during good weather and water conditions. Fishing opportunities are generally poor.

This plan proposes maximum levels of use for each river section based on the desired experience (near-wilderness, near-natural, high density) and the corresponding visitor use levels (low, moderate, high). The recommended maximum levels of use for each river section are identified below. Two levels will be established for each river section--one for the extended weekend and one for the three middle weekdays. For purposes of comparison, the 1981 levels of use on peak days for each river section are indicated in parentheses. (L) = low, (M) = moderate, (H) = high.

#### MAXIMUM LEVELS OF USE

	Weekend Fri., Sat., Sun., Mon.	Weekday Tues., Wed., Thurs.
<b>Pruitt District</b>		
Boxley-Ponca	Low (L)	Low (L)
Ponca/Steel Creek-Kyles Landing	High (H)	Low (L)
Kyles Landing-Pruitt	High (H)	Low (L)
Pruitt-Carver	Moderate (L)	Low (L)
<b>Silver Hill District</b>		
Carver-Mt. Hersey	Low (M)	Low (L)
Mt. Hersey-Woolum	Low (L)	Low (L)
Woolum-Gilbert	Moderate (M)	Moderate (L)
Gilbert-Maumee	Moderate (M)	Moderate (L)
<b>Buffalo District</b>		
Maumee-Buffalo Point	High (H)	High (L)
Buffalo Point-Rush	High (H)	High (M)
Rush-Buffalo City	Low (L)	Low (L)

From these maximum levels of use, the maximum number of boats (canoes, johnboats, kayaks, rubber rafts, and inner tubes) to be permitted on a given section of the river on a given day can be calculated by multiplying the maximum number of boats per mile by the number of river miles in the individual river section. For example, the Ponca/Steel Creek to Kyles Landing section is 10.3 miles long and the proposed use level for weekdays is low (0-8 canoes per mile). To determine the maximum number of canoes to be permitted on this section on any weekday, multiply 8 (the maximum number of canoes per mile) by 10.3 the number of river miles. The maximum number of canoes permitted would be 82. Charts 1 and 2 on the following pages show the proposed levels of use compared to the 1981 levels. Table 1 in Appendix A also provides details of 1981 use. The extent of johnboat use in 1981 for the Rush to Buffalo City section is included in Charts 1 through 4.

In addition to the discussions above, past visitation patterns and proposed development were important considerations in establishing use levels:

### **Ponca/Steel Creek/Kyles Landing/Pruitt**

Traditionally, spring use has been high on weekends with congestion at launch areas, shoals, and the Kyles Landing camping area. Although at these times visitation closely approaches the limits for visitor safety, low use during the week will enable some visitors to have the "near-wilderness" experience in this extraordinarily beautiful area.

### **Pruitt/Carver/Mt. Hersey/Woolum**

This traditionally low use stretch of the river would, except for Pruitt to Carver on weekends, remain that way. The visitor could start at Ponca on Tuesday and have five days or so in a low use situation ending at Woolum or beyond. The proposed level of use for Pruitt to Carver on weekends (moderate) will allow an increase in use from present levels.

### **Woolum/Gilbert/Maumee**

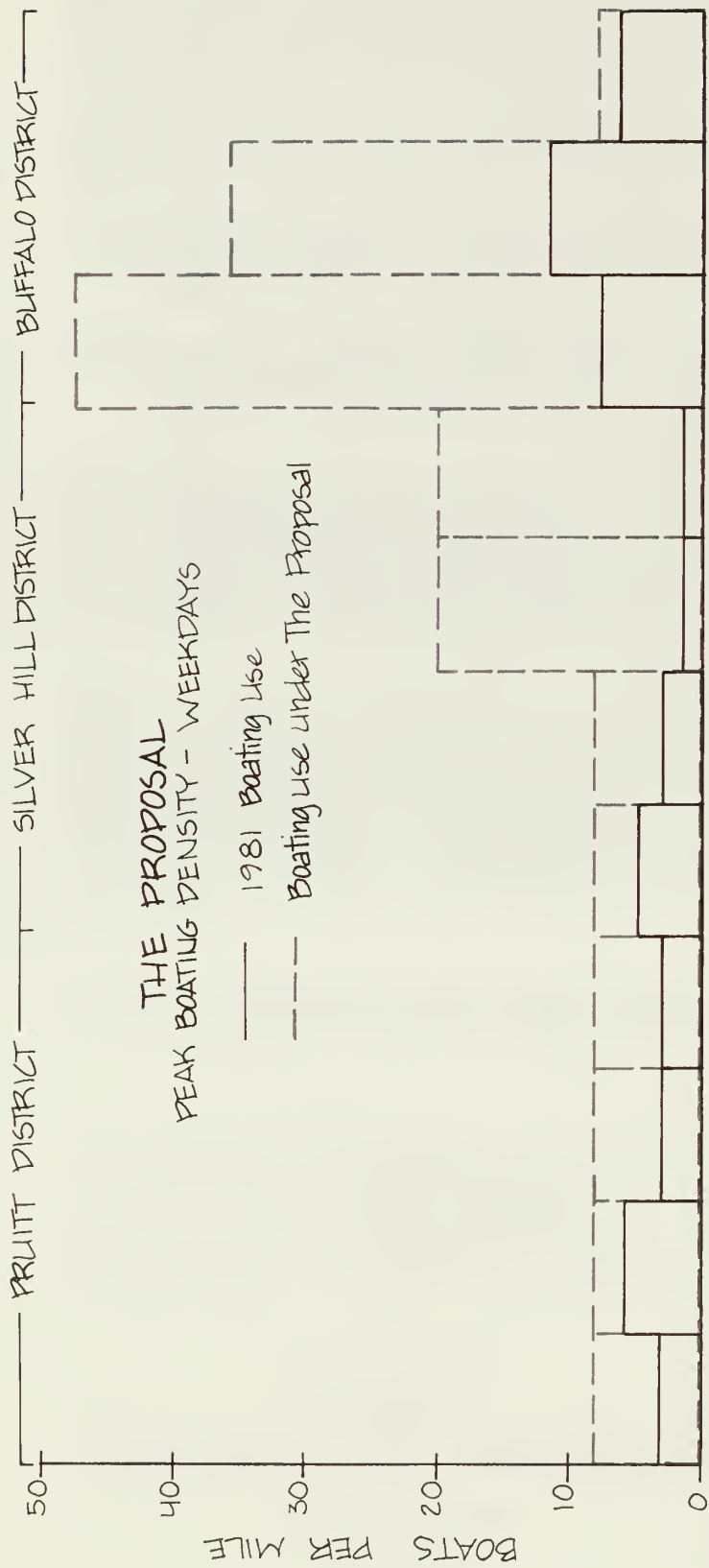
Visitor use, which is generally light at present, can be expected to increase to the upper range of the moderate level when Tyler Bend is developed.

### **Maumee/Buffalo Point/Rush**

Presently, use is high on weekends and low to moderate on weekdays. No increases are in order at present on weekends because the launch facilities are inadequate for the present use. However, as visitor demand increases with the development of the proposed Highway 14 campground and improvement of existing launch facilities, an increase of approximately 20 percent will be allowed.

### **Rush to Buffalo City**

This section has traditionally been a low use area. Because almost all of the land adjoining the river has been established as wilderness, this section is a natural for low use.



RUSH ~ BUFFALO CITY

BUFFALO POINT ~ RUSH

MALMEE ~ BUFFALO POINT

GILBERT ~ MALMEE

WOOLLUM ~ GILBERT

MT HERSEY ~ WOOLLUM

CARVER ~ MT HERSEY

PRUITT ~ CARVER

KYLES LANDING ~ PRUITT

PONCA/STEEL CREEK ~ KYLES LANDING

BOXLEY/PONCA





- RUSH - BUFFALO CITY
- BUFFALO POINT - RUSH
- MAUMEE - BUFFALO POINT
- GILBERT - MAUMEE
- WOOLLUM - GILBERT
- MT HERSEY - WOOLLUM
- CARVER - MT HERSEY
- PRUITT - CARVER
- KYLES LANDING - PRUITT
- PONCA/STEEL CREEK - KYLES LANDING
- BOXLEY/PONCA

## **Managing Visitor Use**

In order to effectively manage visitor use within the carrying capacities noted above, the National Park Service will use the following methods:

### **Information**

The public will be informed about the kinds of recreational opportunities available on the various river sections during the different seasons through pamphlets, concessioners, information stations, signs, interpretive programs, and publicity in newspapers and magazines and on radio and television.

### **Development**

Launch areas, access roads, camping areas, and related facilities will be improved as described in the master plan, development concept plans, and other approved planning documents. Accessibility for the handicapped will be provided in accordance with various federal laws and National Park Service policies.

### **Regulations**

Increased enforcement of park regulations will reduce illegal activities and conflicts among visitors.

### **Monitoring of Environmental Impacts and Visitor Experiences**

The park staff will monitor impacts on water quality, vegetation, and other resources. Surveys of visitor use patterns and visitor reactions and preferences will be conducted. Adjustments in management strategies may be necessary as a result of certain environmental impacts or changing visitor needs and desires.

### **Strategies for Limiting Use**

Because well over half of the visitors who float the Buffalo rent canoes from concessioners, an effective method for limiting canoe use in the past has been to limit the number of canoes allotted to each concessioner by district. This plan proposes to continue that policy as the primary method for controlling the number of visits. Because camping and canoe use frequently go together, the percentage of campers on gravel bars and primitive camping areas is controlled to a significant degree when canoe use is controlled.

If it is determined that current use of a river section is adversely affecting the environment or is exceeding the carrying capacity (maximum level of use) 2-3 times in one year, one or more of the following measures will be implemented on the impacted river section during the affected period of the week. Implementation will depend upon the availability of funds and staff:

- (1) Require concessioners to distribute their put-ins to more than one location. For example, on a given day a certain percentage of their canoes would launch at one access point and the remainder at another access point.
- (2) Require concessioners to stagger put-in times at certain locations.

(3) Require a permit system for private floaters. Some of the permits would be distributed in advance of the float date on a first-come basis by either writing to or visiting a Buffalo National River office. This would accommodate those who have to make plans well in advance of their trip or who desire guaranteed access to a specific section of the river. The remaining permits would be available on a first-come basis at the particular launch site on the desired day of the float. These permits would accommodate those who decide to make a float trip with little advance notice, generally as a result of good weather and water conditions. Those not able to obtain a permit under either procedure would usually be able to float another section of the river. The number of permits would be based on the percentage of private floaters compared to concession floaters during the past few years on that given section of the river.

### **Allocation of Canoes and Johnboats to Concessioners**

Because the carrying capacity has, for the most part, been reached on the upper river, there will be no increase in concession canoes.

Because middle river concessioners do not usually rent all the canoes they have, concession canoes will not be increased at this time. If visitation rises on the middle river due to the Tyler Bend development and/or other reasons, concession canoes will be increased based on the then current ratio of private/concession canoe use, the recreational objectives, and the carrying capacities for these river sections.

Because of congested conditions at the put-in/take-out areas on the lower river, it is not advisable to increase the number of canoes on the lower river at this time. Improvement of launch facilities at North Maumee, Highway 14, Buffalo Point, and Rush should relieve the congestion problem to some extent, and at that time the National Park Service will consider an increase in concession canoes.

The number of allotted johnboats is more than adequate for visitor demand, and johnboat allocations will not be increased.

As shown in Chart 8, Maumee to Buffalo Point is the most heavily used stretch of the river on a yearly basis. Current regulations allow Silver Hill concessioners unlimited put-ins at Maumee-South which requires taking out in the Buffalo District. This in effect shifts canoe use from one district to another. If Buffalo District concessioners, who have or might in the future purchase Silver Hill concession operations and consistently put-in at Maumee-South, a significant increase in canoe traffic on the lower river would result. There are various administrative methods of achieving the goal of retaining existing concession canoe allocations on a district basis. They are: 1) restricting Silver Hill District concessioners' use of Maumee-South to the level of such use that occurred in 1981, and 2) transferring the Morningstar and Marshall concessions and Maumee-South access site to Buffalo District. This matter will be discussed with the concessioners.

## CAMPING

The variety of experiences available to canoe and johnboat campers will continue. They include a near-wilderness environment on gravel bars and river banks; a near-natural environment at designated primitive camping areas; and a high density, controlled environment at extensively developed designated camping areas.

Campers will be encouraged to camp at locations other than Kyles Landing to reduce congestion. This will be accomplished through a public information program involving park personnel, concessioners, and the news media. In addition, consideration will be given to expanding camping at Kyles Landing and Erbie. Visitors will continue to be warned, through park literature and signs, of dangers to life and property resulting from flooding. Management will closely monitor visitors' camping habits to ascertain whether restrictions on camping are necessary. Major improvements have been previously approved for camping and related facilities at Tyler Bend and Highway 14 Bridge in addition to improvements to existing facilities along the river corridor.

Johnboat outfitters that use the White River will be issued annual commercial use licenses allowing them to camp between the mouth of the Buffalo River and the lower end of Hudson Bar, a distance of approximately 1 ½ miles.

## FISHING

Under the proposal, the low density levels established on weekends for boats on three sections of the river--above the Ponca bridge, Carver to Woolum, and Rush to the White River--will ensure fishermen who prefer to fish with minimal disturbance, a total of 50.7 miles or 37 percent of the river in which to achieve this experience. On weekdays (Tuesday-Thursday) the number of miles of river to be maintained at a low density of canoe use is increased by another 29.3 miles for a total of 80 river miles or 59 percent of the total river inside the park. Opportunities for fishermen to have solitude will be reduced on those sections of the river with moderate and high canoe densities, but by fishing during the early morning or late afternoon, fair fishing opportunities will be possible. Monitoring of the fishery to assess impacts will continue.

## RIVER ACCESS

Under the proposal, the following criteria will be utilized in assessing the appropriateness and need of low use access sites:

- Adequacy for the intended use
- Lack of or limited potential for environmental damage (erosion, litter/dumping, and disturbance of wildlife and archeological, historical, and natural sites).
- Lack of or limited potential for conflict with other users and/or adjacent landowners.
- Lack of or limited potential for adverse impacts on the character of a specific river segment.



## ALTERNATIVE I

Under this "no action" alternative, the present policy of limiting the number of crafts allotted to canoe and johnboat concessioners would continue. Private use would remain uncontrolled. Mitigating measures such as those identified in the proposal would not be implemented or expedited.

Camping at designated sites or along the river corridor would continue as at present. Camping can be expected to increase with no limits being placed on boating. Johnboat outfitters without concession permits would not be allowed to camp on the river.

Since limitations on canoe traffic will not occur as in the proposal and alternative II, present impacts of canoe traffic on fishing will continue. Monitoring of the fishery to assess impacts will continue.

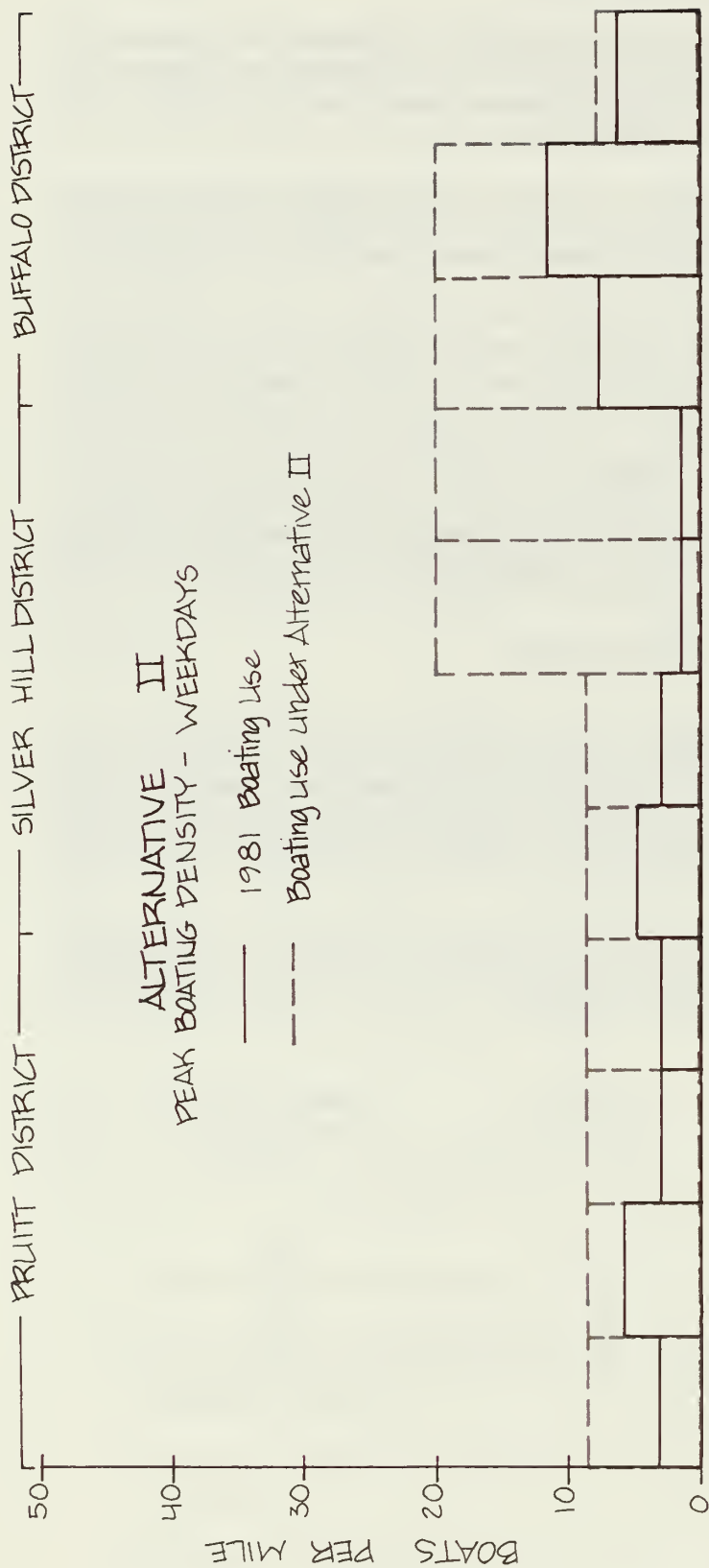
The present policy of permitting vehicular access to numerous formal and informal river access sites would continue. Closures of low use access sites would be implemented only occasionally after evidence of significant environmental damage or conflict. No standardized criteria would be established.

## ALTERNATIVE II

Under this alternative, the present policy of limiting the number of crafts allotted to canoe and johnboat concessioners would continue. In addition, a boat use limit would be established below 1981 use levels for those sections that received high use on weekends (a density of over 20 boats per mile) during the 1981 season (see Charts 3 and 4).

The sections identified below, which are designated for high use in the proposal, would be limited to a moderate density level of 20 boats per mile. Otherwise, alternative II levels are the same as the proposal.

	Proposal Density Level	Alternative II Density Level
River Stretch		
Ponca/Steel Creek-Kyles Landing	48	20
Kyles Landing - Pruitt	26	20
Maumee-Buffalo Point	40	20
Buffalo Point-Rush	29	20



RUSH - BUFFALO CITY

BUFFALO POINT - RUSH

MALMEE - BUFFALO POINT

GILBERT - MALMEE

WOOLUM - GILBERT

MT HERSEY - WOOLUM

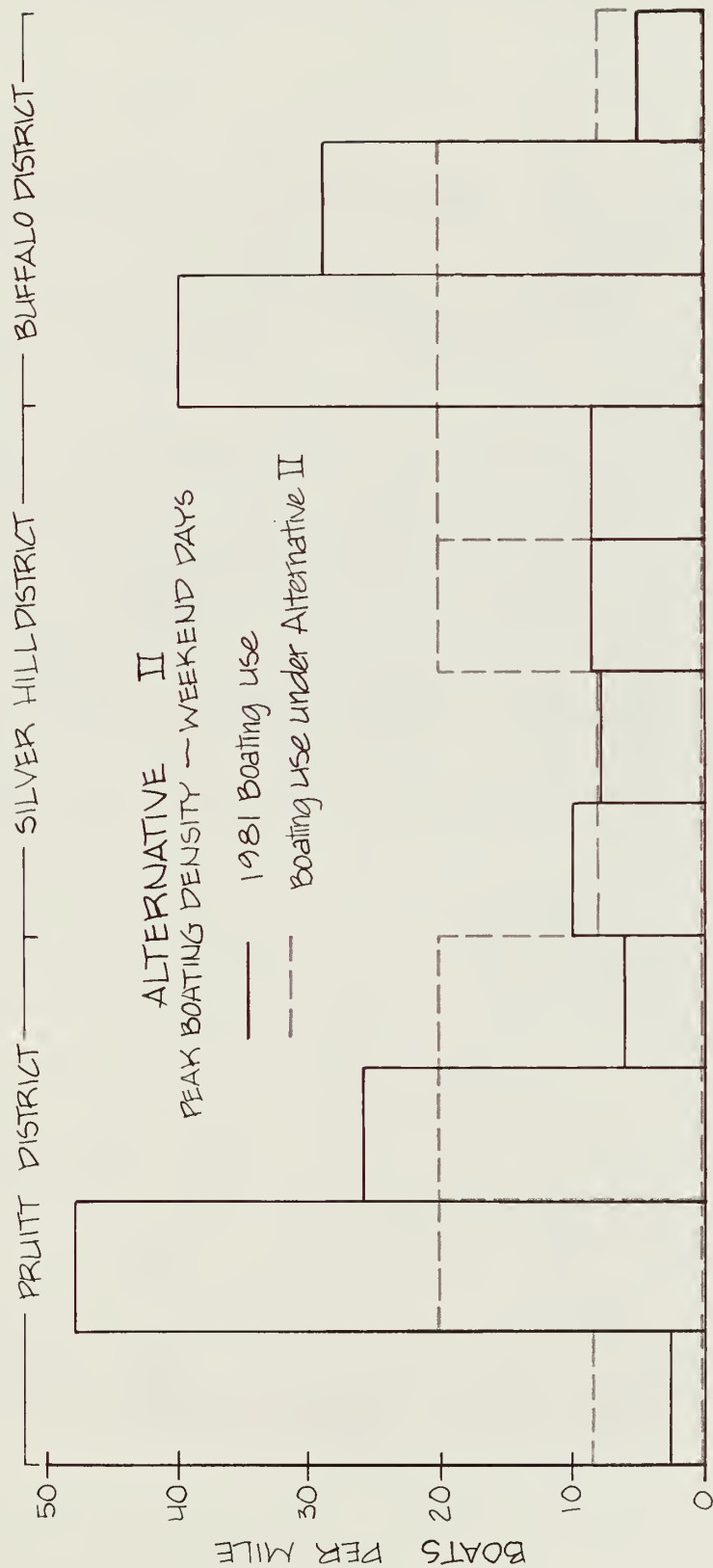
CARVER - MT HERSEY

PRUITT - CARVER

KYLES LANDING - PRUITT

PONCA/STEEL CREEK - KYLES LANDING

BOXLEY/PONCA



RUSH - BUFFALO CITY

BUFFALO POINT - RUSH

MAUMEE - BUFFALO POINT

GILBERT - MAUMEE

WOOLLUM - GILBERT

MT HERSEY - WOOLLUM

CARVER - MT HERSEY

PRUITT - CARVER

KYLES LANDING - PRUITT

PONCA/STEEL CREEK - KYLES LANDING

BOXLEY/PONCA

The following steps would be taken immediately on the above river sections and on others if it is determined that current use of a river section is adversely affecting the environment, the quality of the river experience is diminished, or the maximum level of use is exceeded 2-3 times in one year.

**Concession Canoes.** Restrictions on time periods and use of identified river stretches will be implemented, limiting the number of concession crafts to the percent of use recorded in 1981.

**Private Canoes.** A permit system will be implemented, limiting the number of private canoes to the percent of use recorded in 1981.

As in the proposal, canoeists and johnboaters would be permitted to camp at designated sites and on gravel bars and river banks. Visitors' camping habits and impacts on the environment would be monitored. Johnboat outfitters without concession permits would not be allowed to camp on the river.

As in the proposal, this alternative would maintain low levels of use on weekdays, which means that 59 percent of the river or 80 river miles would be available to persons wishing to fish with minimal canoe disturbance. On weekends, however, the area above the Ponca bridge and below Rush would have low densities; this would include 52 miles or 35 percent of the river. Three sections of river, Ponca to Pruitt, Carver to Mt. Hersey, and Maumee to Rush, would have reduced levels of canoe use on weekends which should decrease fishing pressure on these sections significantly. The remaining river sections, Pruitt to Carver, Woolum to Maumee, Rush to Buffalo City on weekends, and Woolum to Rush on weekdays, would receive increased fishing pressure, as would the entire river on weekdays.

Low use river access sites would be assessed under specific criteria as identified in the proposal.





ENVIRONMENTAL ASSESSMENT



PROPOSAL

**PRUITT AND BUFFALO DISTRICTS**

**Natural Resources**

**Vegetation:** Temporary loss of vegetative cover and diversity, soil compaction, and erosion of streambanks in heavily used areas would continue; however, impacts are acceptable at current levels of use, and the increased use will not result in significant additional damage. Proposed improvements will virtually eliminate additional impacts. Trash and litter will increase at the same rate as the activity increases. Known endangered or threatened species would not be affected.

**Wildlife:** Human activity would continue to disturb some animals. Steps are being taken to protect endangered bat species from visitor impacts; no other known threatened or endangered species are impacted.

**Water Quality:** Water quality is presently good and would remain so.

**Cultural Resources**

Problems with vandalism, pot hunting, and wear and tear on resources would continue but should not increase substantially over present levels since most of these activities are not associated with canoeing or other forms of river use.

**Park Facilities**

Some crowding would continue to occur at popular access sites and camping areas but should not substantially increase. Litter and sanitation problems will increase at the same rate as the increased use. To lessen the impacts of camping, visitors would be encouraged to utilize sites that do not receive heavy use. Camping would be monitored to determine future needs and/or restrictions. Presently, all camping areas fully recover from season to season. Effects on road maintenance would be minimal.

**SILVER HILL DISTRICT**

Since proposed levels of use are higher than historic levels, impacts on natural resources similar to those in the Pruitt and Buffalo Districts could be expected to occur; however, the level of impacts would remain minimal and acceptable.

SAME

Less use occurs on the middle stretch of river; and therefore, impacts are less.

Concessions	<p>Given the present number of concession canoes, opportunities for renting more canoes are possible in all districts. If canoe increases are granted to Silver Hill and Buffalo District concessioners, further economic growth could result. Possible restrictions on concession use of access points or the staggering of put-in times would have negative economic impact due to increases in cost. Possible restrictions on put-ins at Maumee by Silver Hill concessioners will have a slightly negative economic impact.</p>	SAME
Visitor Use/Socioeconomic	<p>Crowding and congestion would continue at popular canoe access sites and camping areas on weekends but would not increase substantially. A permit system or control of put-in times and place would be instituted if the ceiling is exceeded, which would limit private canoe use and interfere with visitors' plans. Unavoidable hazards due to recreational use of a floodplain would continue.</p>	Incidents of crowding and congestion could occur if visitor use approaches the proposed ceiling. However, use levels would be moderate and would not create significant problems. The impacts of a permit system would be the same.
Fishing	<p>The quality of fishing would remain at the current level for those sections where canoe and johnboat use will be maintained at existing levels of use. An improvement may be expected for the one section where such use will be reduced, and quality may be diminished for those sections where use would increase.</p>	SAME
River Access	<p>Some inconvenience may occur to a limited number of people resulting from closure of low use sites. Resource protection would be enhanced, and opportunities for conflicts between visitors and adjacent landowners would be reduced.</p>	SAME
NPS Management	<p>The proposed actions would require increased supervision and monitoring of recreation use, especially at access points. Regulations would be needed to enforce the provisions of the plan. A permit system would most likely require additional staffing and funding. A public information program would be needed to inform park users of changes in river use regulations.</p>	SAME



## ALTERNATIVE I NO ACTION AND ITS CONSEQUENCES

PRUITT AND BUFFALO DISTRICTS		SILVER HILL DISTRICT
Natural Resources	<p>Vegetation: Although impacts are acceptable at current levels of use, loss of vegetative cover and diversity, soil compaction, and erosion of streambanks in heavily used areas could increase. Known endangered or threatened species would not be affected. Wildlife: Human activity would continue to disturb same animals. Steps are being taken to protect endangered bat species from visitor impacts; no other known threatened or endangered species are impacted.</p> <p>Water quality: Water quality is presently good but may deteriorate as river use increases because of litter and sanitation problems.</p>	<p>Since proposed levels of use are higher than historic levels, impacts on natural resources similar to those in the Pruitt and Buffalo Districts could be expected to occur; however, the levels of impacts would remain acceptable.</p>
Cultural Resources	Problems with vandalism, pot hunting, and wear and tear on resources would remain at current levels since these activities are not directly related to river use activities.	SAME
Park Facilities	Crowding at popular access sites and camping areas and the consequent levels of litter and trash would most likely increase as canoe use rises. Maintenance of the 50 miles of improved roads would increase up to 50 percent, and a minimal increase in the maintenance of the 250 miles of unimproved roads would also occur.	SAME
Concessions	No effect	SAME
Visitor Use/Socioeconomic	Crowding and congestion would continue at popular access sites and camping areas on weekends and could accelerate with increases in use. Safety problems would continue due to large numbers of people and canoes on the river and at access sites.	
Fishing	The quality of fishing may diminish without limits on canoe and johnboat use.	SAME
River Access	Decisions on closing low use sites without established criteria may be questioned.	SAME
NPS Management	No change, no effect.	

## ALTERNATIVE II AND ITS CONSEQUENCES

### **PRUITT AND BUFFALO DISTRICTS**

### **SILVER HILL DISTRICT**

#### **Natural Resources**

Vegetation: Temporary loss of vegetative cover and diversity, soil compaction, and erosion of streambanks in heavily used areas would continue; however, impacts are acceptable at current levels of use. Limiting use on heavily used river sections would curtail further damage. Known endangered or threatened species would not be affected.

Wildlife: Human activity would continue to disturb some animals. Steps are being taken to protect endangered bat species from visitor impacts; no other known threatened or endangered species are impacted.

Water quality: Water quality is presently good and would remain so.

Same as proposal.

#### **Cultural Resources**

Problems with vandalism, pot hunting, and wear and tear on resources would generally remain at present levels and could potentially decrease; however, it is likely to remain the same since these activities are not directly related to river use.

Same as proposal.

#### **Park Facilities**

Crowding at access points and popular camping areas would be alleviated because of decreases in the number of recreationists allowed on the popular river sections. Litter and sanitation problems would decrease proportionally to the decrease in use. On river sections with ceilings based on historic use, some campsites could experience some crowding but no more than at present. Effects on road maintenance would be minimal.

Same as proposal.

Concessions	<p>Since use on certain sections of the river would be decreased significantly, concession income would be negatively impacted. Restrictions on concession use of access points would have a negative economic impact due to increase in cost. Utilization of alternative access points would result in increases in cost for some and decreases for others. Restrictions on the use of concession permits may have a negative economic impact on concessions.</p>	Same as proposal.
Visitor Use/Socioeconomic	<p>Crowding and congestion would be generally alleviated at popular canoe access sites and camping areas on weekends because of the reduction in use levels. A permit system which would be instituted immediately on certain river sections would interfere with visitors' recreation plans. On other sections of the river, a permit system would be instituted if the ceiling were exceeded with similar effects.</p>	Same as proposal.
Fishing	<p>The quality of fishing can be expected to improve where boating use decreases. This is especially true for those sections where such use will be reduced from high density to moderate.</p>	SAME
River Access	<p>A limited number of people may be inconvenienced by closure of low use sites. Resource protection would be enhanced and opportunities for conflicts between visitors and adjacent landowners would be reduced.</p>	SAME
NPS Management	<p>Implementation of alternative II would require a substantial increase in supervision and monitoring of recreation use, especially at access points. Regulations would be needed immediately to enforce the permit system on certain sections of the river. Additional staff and funding would be necessary. A full-scale public information program would be needed to inform park users of changes in river use management.</p>	





## APPENDIXES



## APPENDIX A

### DATA ON FLOATING

The following charts and tables will provide more specific information on canoe use. The data were gathered from concessioners' rental receipts and actual canoe counts for 1981. Although these figures are estimates, they represent the best information available.

It should be noted that the figures identify numbers of canoes, not people. Since almost all of the canoes carried two passengers, the estimated number of canoeists would be twice the number of canoes recorded. Kayaks, rubber rafts, and inner tubes represent a very minimal number of crafts and are not included in the data on canoe use. Data on the extent of johnboat use are quite limited at this time, and such use is not included in the following charts and tables:

**Chart 5** indicates the total number of canoes recorded by river section on a monthly basis, with an annual total for each section. The majority of canoe use occurs on four river sections: Maumee to Buffalo Point, Buffalo Point to Rush, Ponca/Steel Creek to Kyles Landing, and Kyles Landing to Pruitt. Use of the river is largely determined by weather and water conditions, with a short season in the upper river and a longer one on the lower river.

**Chart 6** indicates canoe use by day of the week per river section. The vast majority of use occurs on Saturdays and Sundays, except for the very upper and lower ends of the river, where use is limited.

**Chart 7** identifies the days of highest use on the various river stretches by weekend and weekday over a three-month period in 1981. The peaks and valleys of this bar graph reflect the effect of weather and water conditions on river use, particularly in the upper river; use of the lower river is more stable. This chart also reflects the extensive use of the upper and lower river and compares the low use on weekdays to high use on weekends throughout the entire river corridor. The Boxley to Ponca river section is not shown because of its very limited use.

**Table 1** identifies canoe density per river section for extended weekends (Friday, Saturday, Sunday, and Monday) and weekdays (Tuesday, Wednesday, and Thursday)--a good way to compare the number of canoes on the various river sections. Canoe density is determined by dividing the number of river miles of a specific river section into the number of canoes recorded for a particular day.

The river miles identified in this table were divided into the second highest canoe use days recorded in 1981 for both the weekend and weekday periods, as indicated in Chart 7. The highest canoe use day for each river section was not a good representation of use; the difference between the highest and second highest day exceeded 200 canoes on some river sections.

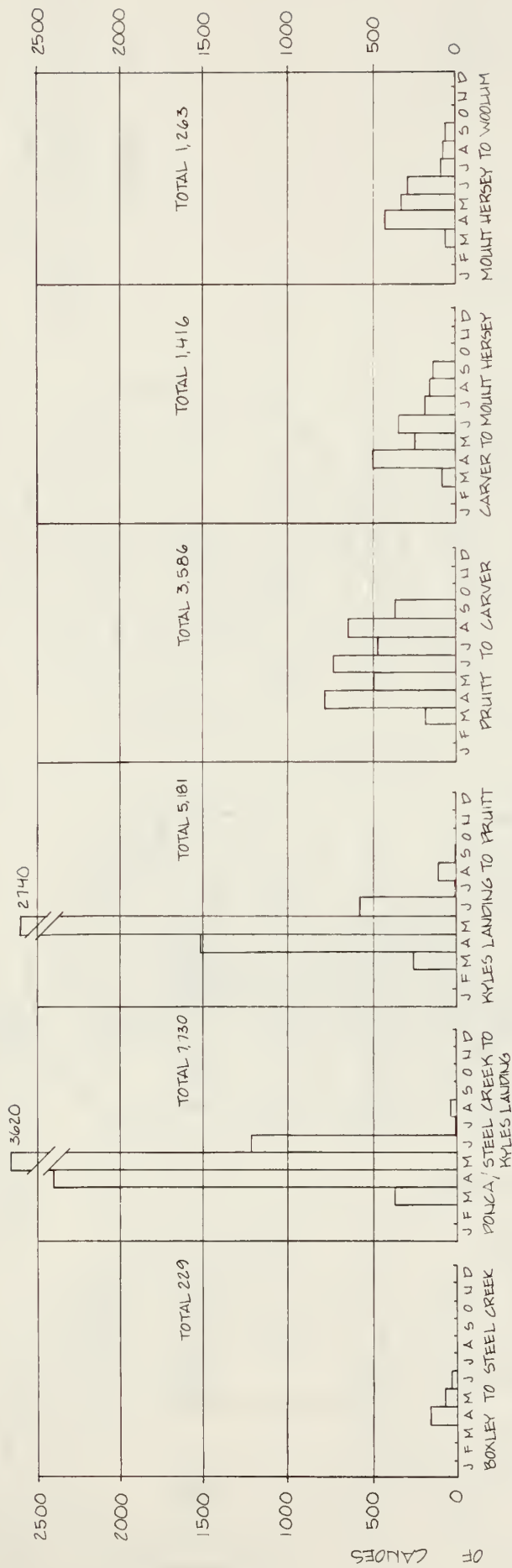
As an example, the canoe density for the Mt. Hersey to Woolum section of the river during the weekend period is determined as follows:

$$\frac{\text{2nd highest number of canoes recorded in one day in 1981 (refer to Chart 7)}}{\text{River miles}} = \frac{70}{8.5} = 8$$

It should be noted that canoe density does not take into consideration the time of put-in and take-out. With most put-ins in the early or mid-morning period, higher density levels occur at the upper end of a given river stretch with lower density levels at the lower end.

**Chart 8** identifies total canoe use for each river section and the percent of canoes provided by concessioners versus those brought to the river by recreationists. These figures were obtained by actual canoe counts.





3090

2860

2780

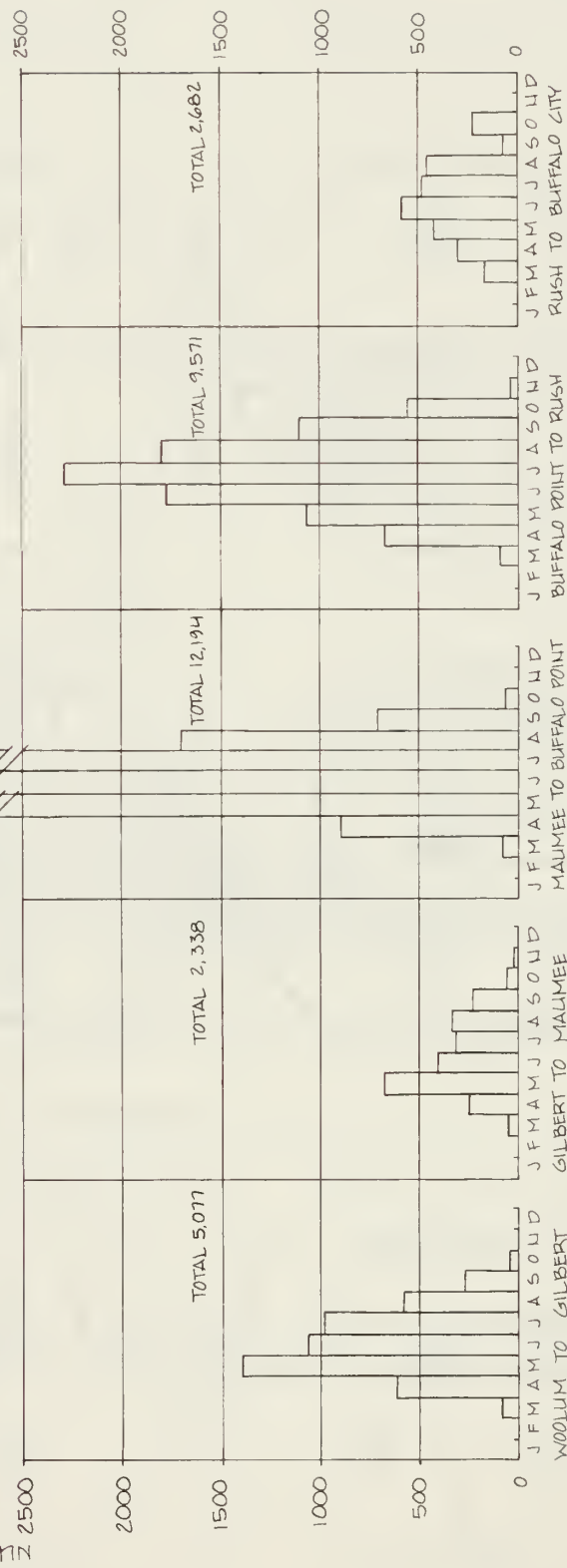
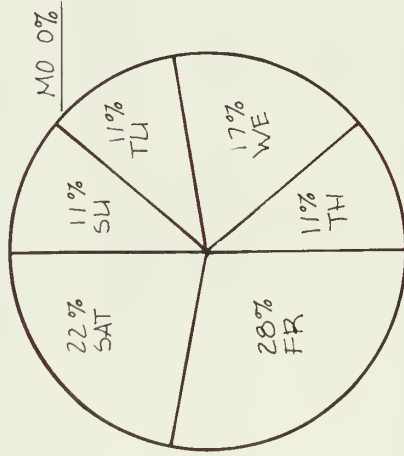


CHART 5

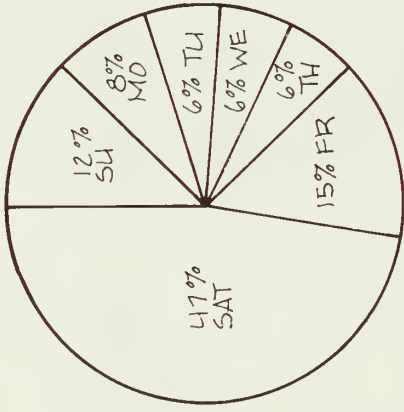
ANNUAL/MONTHLY CANOE USE 1981  
Buffalo National River, Arkansas

SOURCE: 1981 Concession receipts & actual counts

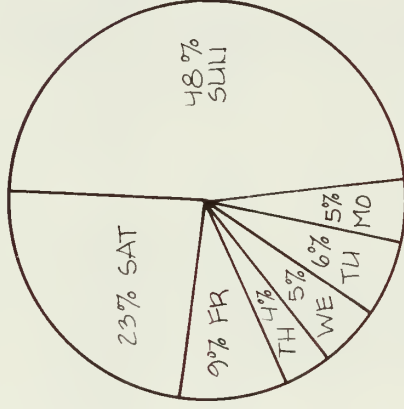
BOXLEY TO STEEL CREEK



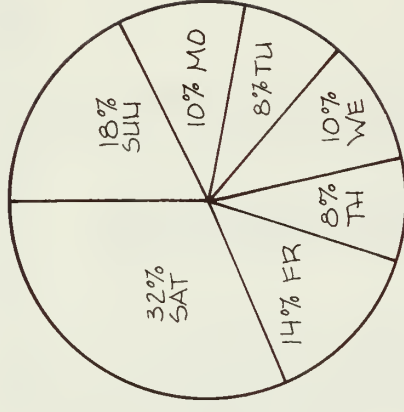
PONCA/  
STEEL CREEK TO KYLES LANDING



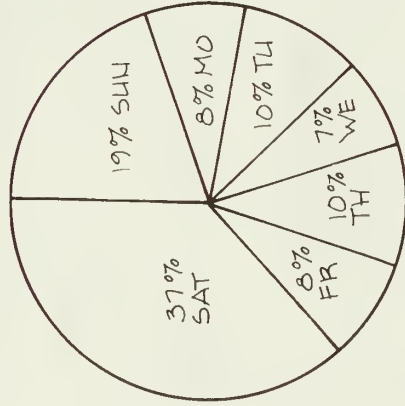
KYLES LANDING TO PRUITT



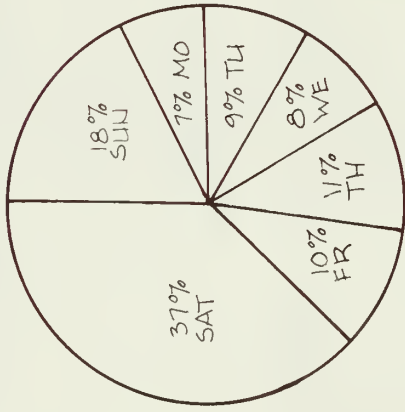
PRUITT TO CARVER



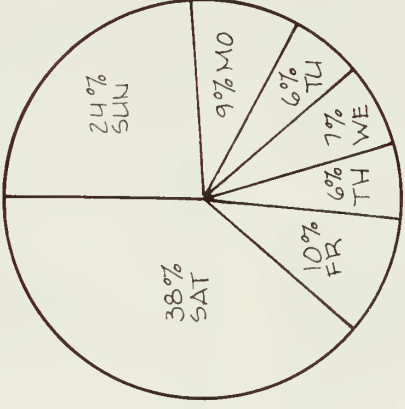
CARVER TO MOUNT HERSEY



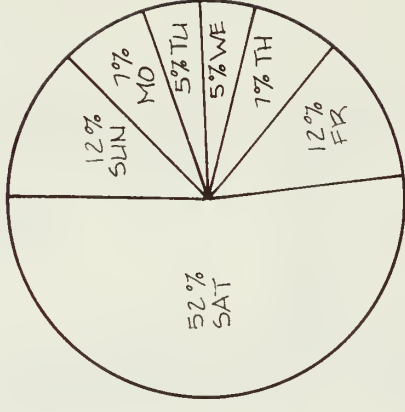
MOUNT HERSEY TO WOOLLUM



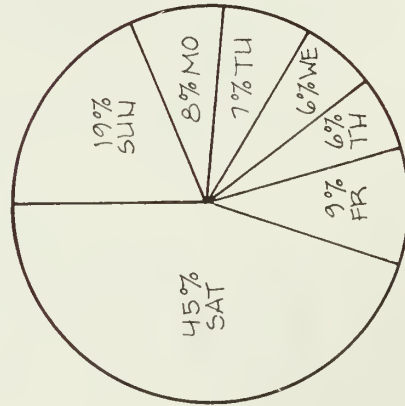
WOOLLUM TO GILBERT



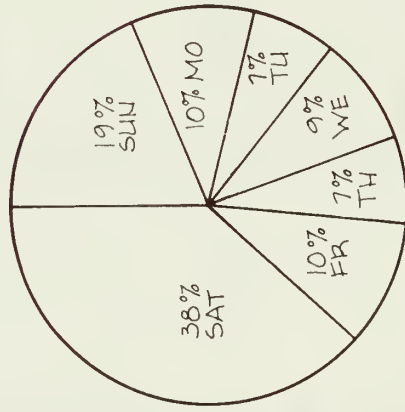
GILBERT TO MAUMEE



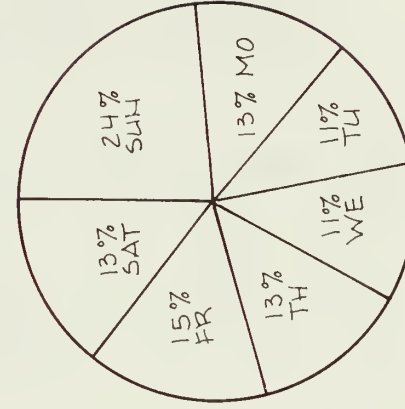
MAUMEE TO BUFFALO POINT



BUFFALO POINT TO RUSH



RUSH TO BUFFALO CITY



## CHART 6

### DAILY CANOE USE 1981

Buffalo National River • Arkansas

SOURCE: 1981 Concession receipts & actual counts

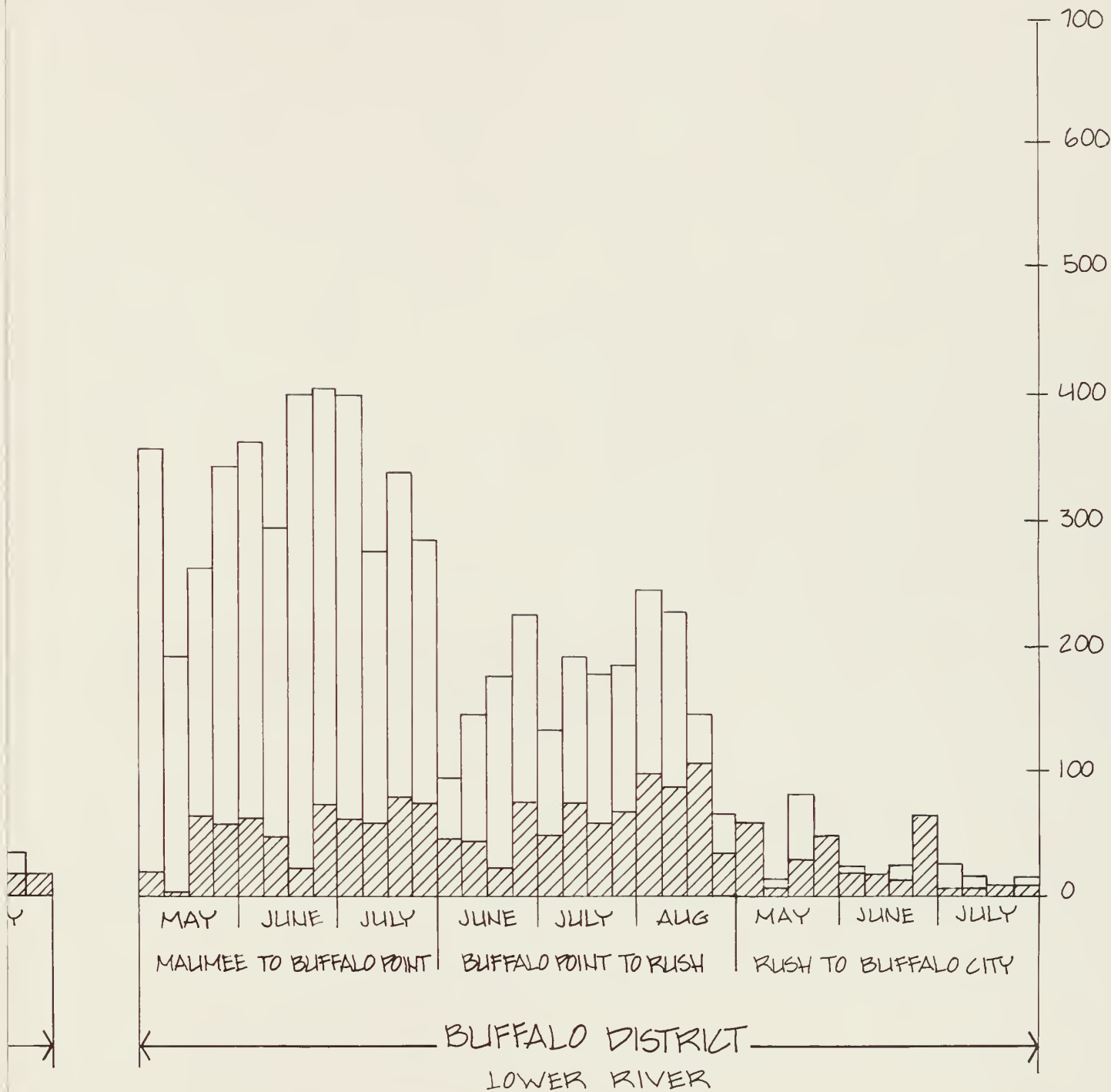
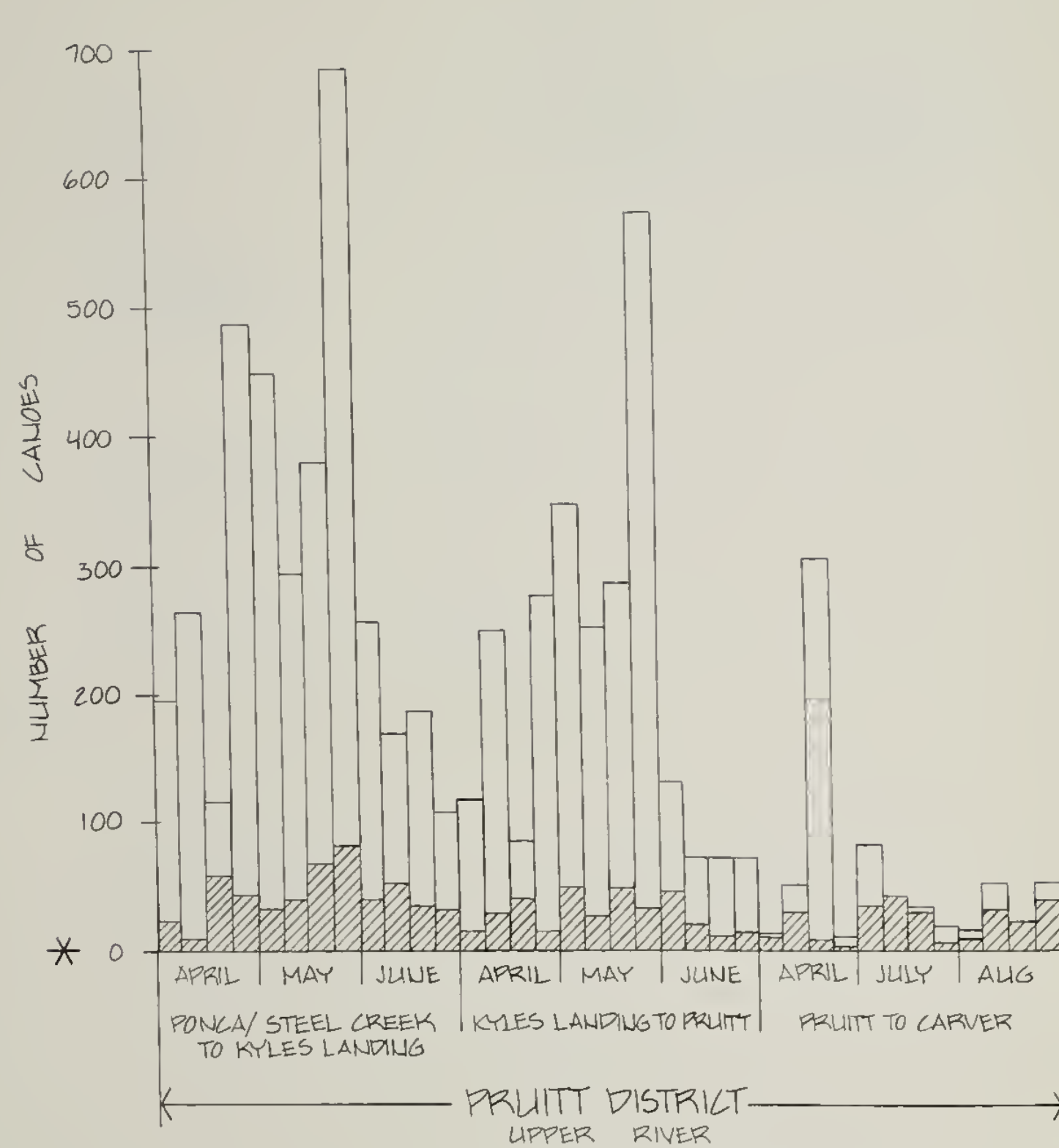


CHART 7

CANOE USE ~ PEAK DAYS 1981

Buffalo National River • Arkansas



SOURCE: 1981 Concession receipts & actual counts

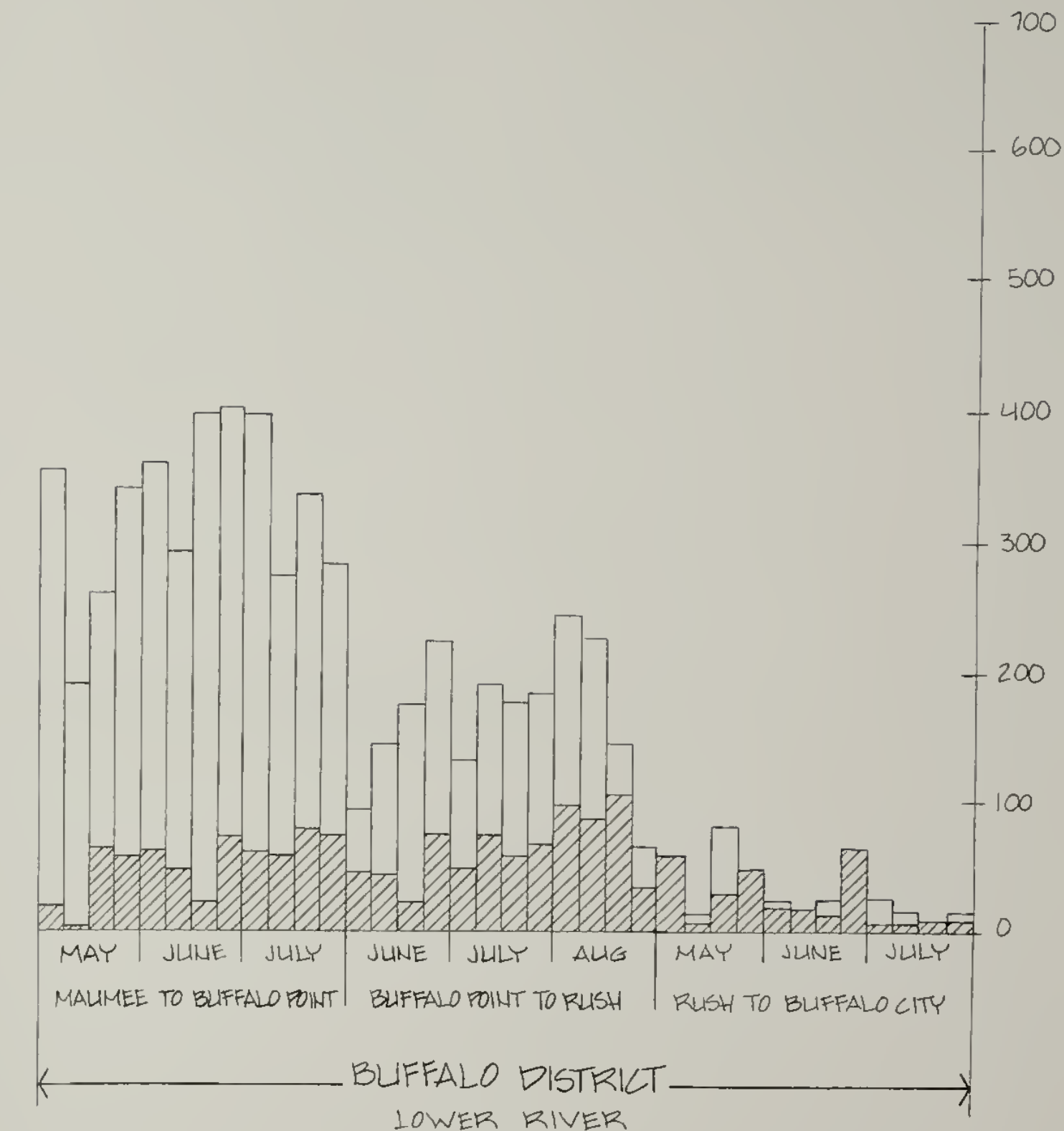
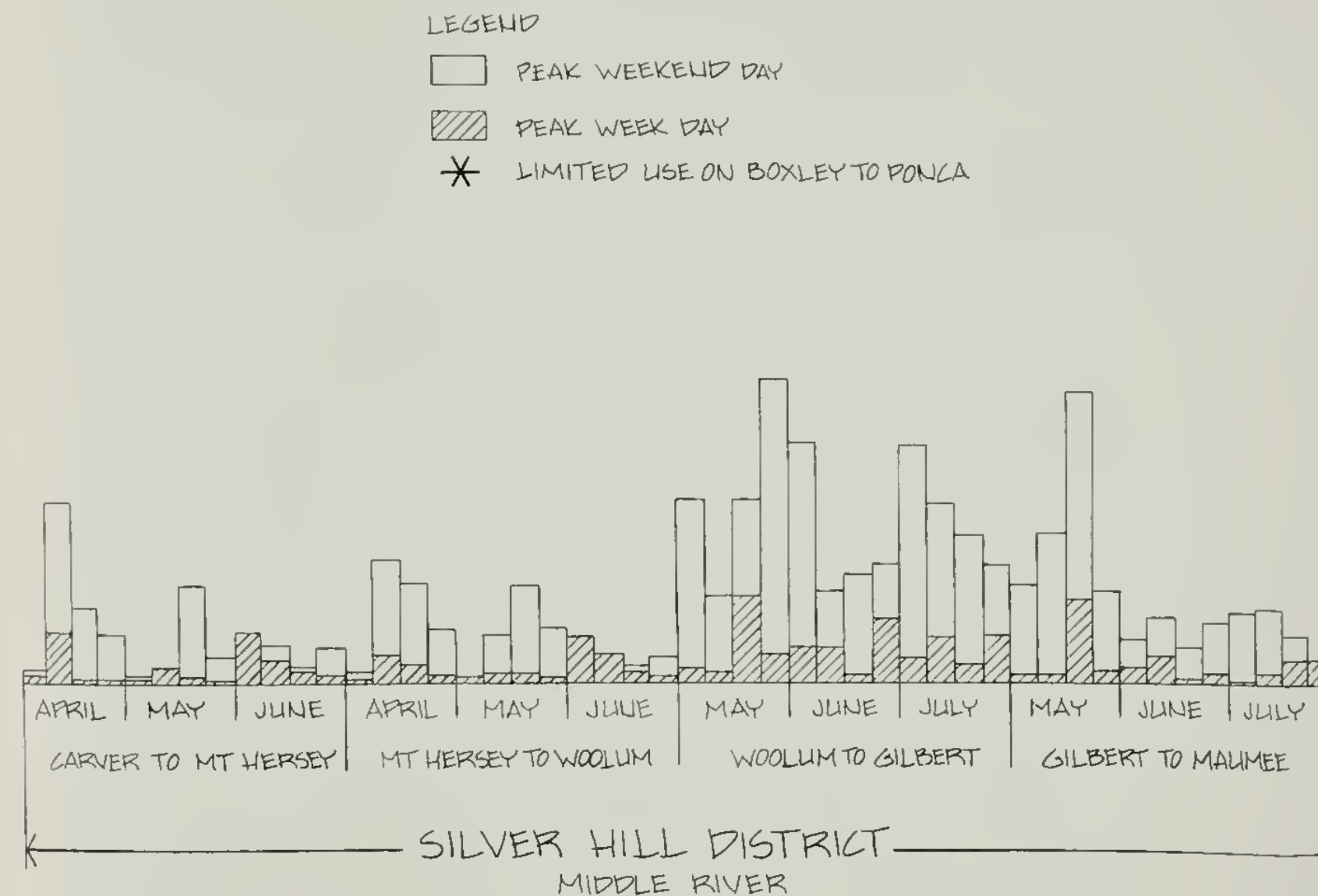


CHART 7  
CANOE USE - PEAK DAYS 1981  
Buffalo National River • Arkansas



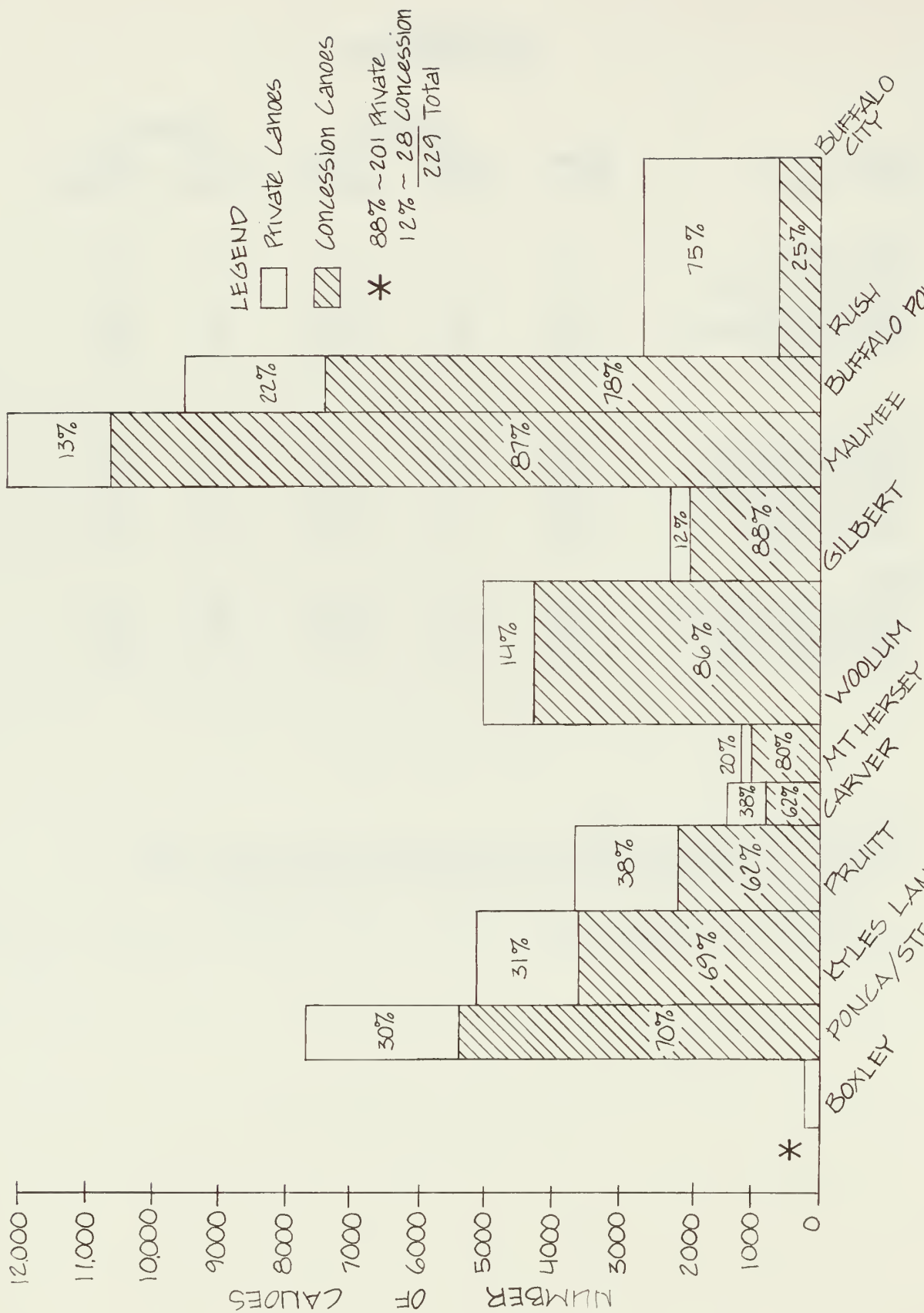
TABLE I  
1981 CANOE USE

District River Section	River Miles	Weekend		Weekday	
		(1) Density	(2) Maximum	(1) Density	(2) Maximum
Pruitt					
Boxley-Ponca	6.1	3	16	3	16
Ponca/Steel Creek- Kyles Landing	10.3	48	490	6	64
Kyles Landing-Pruitt	13.2	26	348	3	44
Pruitt-Carver	11.3	6	72	3	35
Silver Hill					
Carver-Mt. Hersey	6.9	10	71	5	34
Mt. Hersey-Woolum	8.5	8	71	3	23
Woolum-Gilbert	20.7	9	176	2	44
Gilbert-Maumee	12.9	9	110	2	19
Buffalo					
Maumee-Buffalo Point	10.2	40	408	8	76
Buffalo Point-Rush	7.9	29	227	12	97
*Rush-Buffalo City	24.3	5	117	7	174

(1) Number of canoes per mile

(2) Number of canoes recorded on the second highest day of use in 1981 for the identified river section and period of the week(refer to Chart 3).

\* Includes estimated johnboat use



**CHART 8**  
DISTRIBUTION AND COMPOSITION OF CANOE USE - 1981  
Buffalo National River - Arkansas

SOURCE: 1981 Concession receipts & actual counts

# APPENDIX B

## TABLE 2

### BUFFALO NATIONAL RIVER

#### CAMPING FACILITIES

<u>Camping Area</u>	<u>Campsites Existing</u>	<u>Campsites Proposed in DCPs *</u>	<u>Campsites Proposed for future</u>	<u>Total Campsites-Future</u>
Lost Valley	15	15		15
Steel Creek	**	80		80
Kyles Landing	40		28	65
Erbie	12			12
Pruitt (Ozark)	***	50		50
Pruitt (Welch Bluff)			75	75
Hasty	****		15	15
Carver	****		15	15
Mt. Hersey	****		15	15
Woolum	****		15	15
Margaret White	****		15	15
Tyler Bend		100		100
Gilbert	****		0	0
Maumee South	****		15	15
Highway 14 Bridge		80 plus		80 plus
		4 group		4 group
Buffalo Point	118			118
Rush	15			15

\*) Development concept plans

\*\*) Area presently used with minimal facilities

\*\*\*) Existing camp sites will be upgraded

\*\*\*\*) Area presently used, but with minimal or no facilities. Development of area approved in the Master Plan with number of sites not specified. Development of facilities at Gilbert are not anticipated due to availability of private facilities.



## APPENDIX C

### CONSULTATION AND COORDINATION

Prior to and during preparation of this plan, the National Park Service discussed management of the river with many local residents, local civic organizations, representatives of user groups, and canoe and johnboat concessioners to identify problems and potential solutions.

Public meetings will be held on this document in appropriate locations. In addition, this document will be sent to many individuals and organizations and the following agencies:

#### FEDERAL AGENCIES

Advisory Council on Historic Preservation  
Department of Agriculture  
    Forest Service  
    Soil Conservation Service  
Department of the Army  
    Corps of Engineers  
Department of Housing and Urban Development  
Department of the Interior  
    Bureau of Indian Affairs  
    Bureau of Land Management  
    Bureau of Mines  
    Bureau of Reclamation  
    Fish and Wildlife Service  
    Geological Survey

Environmental Protection Agency  
Federal Power Commission

#### STATE AGENCIES

Governor's Office  
Arkansas Department of Parks and Tourism  
State of Arkansas, Department of Planning  
Arkansas State Historic Preservation Office  
Arkansas Game and Fish Commission  
Arkansas Committee on Stream Preservation  
Arkansas Forestry Commission  
Arkansas Archeological Survey  
Northwest Arkansas Economic Development District, Inc.

#### LOCAL GOVERNMENT OFFICIALS IN ARKANSAS COUNTIES

Baxter  
Boone  
Marion  
Newton  
Searcy





## APPENDIX D

### ESTABLISHING LEGISLATION



Public Law 92-237  
92nd Congress, S. 7  
March 1, 1972

### An Act

86 STAT. 44

To provide for the establishment of the Buffalo National River in the State of Arkansas, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving as a free-flowing stream an important segment of the Buffalo River in Arkansas for the benefit and enjoyment of present and future generations, the Secretary of the Interior (hereinafter referred to as the "Secretary") may establish and administer the Buffalo National River. The boundaries of the national river shall be as generally depicted on the drawing entitled "Proposed Buffalo National River" numbered NR-BUF-7103 and dated December 1967, which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. The Secretary is authorized to make minor revisions of the boundaries of the national river when necessary, after advising the Committees on Interior and Insular Affairs of the United States House of Representatives and the United States Senate in writing, but the total acreage within such boundaries shall not exceed ninety-five thousand seven hundred and thirty acres.

Buffalo National River, Ark. Establishment.

SEC. 2. (a) Within the boundaries of the Buffalo National River, the Secretary may acquire lands and waters or interests therein by donation, purchase or exchange, except that lands owned by the State of Arkansas or a political subdivision thereof may be acquired only by donation: *Provided*, That the Secretary may, with funds appropriated for development of the area, reimburse such State for its share of the cost of facilities developed on State park lands if such facilities were developed in a manner approved by the Secretary and if the development of such facilities commenced subsequent to the enactment of this Act: *Provided further*, That such reimbursement shall not exceed a total of \$375,000. When an individual tract of land is only partly within the boundaries of the national river, the Secretary may acquire all of the tract by any of the above methods in order to avoid the payment of severance costs. Land so acquired outside of the boundaries of the national river may be exchanged by the Secretary for non-Federal lands within the national river boundaries, and any portion of the land not utilized for such exchanges may be disposed of in accordance with the provisions of the Federal Property and Administrative Services Act of 1949 (63 Stat. 377; 40 U.S.C. 471 et seq.), as amended. With the concurrence of the agency having custody thereof, any Federal property within the boundaries of the national river may be transferred without consideration to the administrative jurisdiction of the Secretary for administration as part of the national river.

Lands and waters, acquisition.

(b) Except for property which the Secretary determines to be necessary for the purposes of administration, development, access or public use, an owner or owners (hereafter referred to as "owner") of any improved property which is used solely for noncommercial residential purposes on the date of its acquisition by the Secretary or any owner of lands used solely for agricultural purposes (including, but not limited to, grazing) may retain, as a condition of the acquisition of such property or lands, a right of use and occupancy of such property for such residential or agricultural purposes. The term of the right retained shall expire upon the death of the owner or the death of his spouse, whichever occurs later, or in lieu thereof, after a definite term which shall not exceed twenty-five years after the date of acquisition. The owner shall elect, at the time of conveyance, the term of the right

Retention rights.

reserved. The Secretary shall pay the owner the fair market value of the property on the date of such acquisition, less the fair market value of the term retained by the owner. Such right may, during its existence, be conveyed or transferred, but all rights of use and occupancy shall be subject to such terms and conditions as the Secretary deems appropriate to assure the use of such property in accordance with the purposes of this Act. Upon a determination that the property, or any portion thereof, has ceased to be used in accordance with such terms and conditions, the Secretary may terminate the right of use and occupancy by tendering to the holder of such right an amount equal to the fair market value, as of the date of the tender, of that portion of the right which remains unexpired on the date of termination.

"Improved property."

(c) As used in this section the term "improved property" means a detached year-round one-family dwelling which serves as the owner's permanent place of abode at the time of acquisition, and construction of which was begun before September 3, 1969, together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use.

Hunting and fishing, rules and regulations.

SEC. 3. The Secretary shall permit hunting and fishing on lands and waters under his jurisdiction within the boundaries of the Buffalo National River in accordance with applicable Federal and State laws, except that he may designate zones where and establish periods when, no hunting or fishing shall be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Except in emergencies, any rules and regulations of the Secretary pursuant to this section shall be put into effect only after consultation with the Arkansas Fish and Game Commission.

Water resource projects, restriction.

SEC. 4. The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.), on or directly affecting the Buffalo National River and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river is established, as determined by the Secretary. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above the Buffalo National River or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of approval of this Act. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river is established, as determined by the Secretary, nor shall such department or agency request appropriations to begin construction on any such project, whether heretofore or hereafter authorized, without, at least sixty days in advance, (i) advising the Secretary, in writing, of its intention so to do and (ii) reporting to the Committees on Interior and Insular Affairs of the United States House of Representatives and the United States Senate, respectively, the nature of the project involved and the manner in which such project would conflict with the purposes of this Act or would affect the national river and the values to be protected by it under this Act.

Administration.

SEC. 5. The Secretary shall administer, protect, and develop the Buffalo National River in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 555; 16 U.S.C. 1 et seq.), as amended and supplemented; except that any other statutory authority available

March 1, 1972

- 3 -

Pub. Law 92-237

86 STAT. 46

to the Secretary for the conservation and management of natural resources may be utilized to the extent he finds such authority will further the purposes of this Act.

SEC. 6. Within three years from the date of enactment of this Act, the Secretary shall review the area within the boundaries of the national river and shall report to the President, in accordance with subsections 3(c) and 3(d) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132 (c) and (d)), his recommendation as to the suitability or non-suitability of any area within the national river for preservation as a wilderness, and any designation of any such area as a wilderness, shall be accomplished in accordance with said subsections of the Wilderness Act.

Area review;  
report to  
President.

SEC. 7. For the acquisition of lands and interests in lands, there are authorized to be appropriated not more than \$16,115,000. For development of the national river, there are authorized to be appropriated not more than \$283,000 in fiscal year 1974; \$2,923,000 in fiscal year 1975; \$3,643,000 in fiscal year 1976; \$1,262,000 in fiscal year 1977; and \$1,260,000 in fiscal year 1978. The sums appropriated each year shall remain available until expended.

Appropriation.

Approved March 1, 1972.

---

LEGISLATIVE HISTORY:

HOUSE REPORT No. 92-807 accompanying H. R. 8382 (Comm. on Interior and Insular Affairs).

SENATE REPORT No. 92-130 (Comm. on Interior and Insular Affairs).

CONGRESSIONAL RECORD:

Vol. 117 (1971): May 21, considered and passed Senate.

Vol. 118 (1972): Feb. 7, considered and passed House, amended, in lieu of H. R. 8382.

Feb. 9, Senate concurred in House amendment.



## 2. Buffalo

An Act to provide for increases in appropriation ceilings and boundary changes in certain units of the National Park System, and for other purposes. (90 Stat. 2732) (P.L. 94-578)

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### TITLE I—ACQUISITION CEILING INCREASES

SEC. 101. The limitations on appropriations for the acquisition of lands and interests therein within units of the National Park System contained in the following Acts are amended as follows:

\* \* \* \* \*

(3) Buffalo National River, Arkansas: section 7 of the Act of March 1, 1972 (86 Stat. 44), is amended by changing "\$16,115,000" to "\$30,071,500".

\* \* \* \* \*

### TITLE III—MISCELLANEOUS PROVISIONS

\* \* \* \* \*

#### BUFFALO NATIONAL RIVER

SEC. 310. Section 7 of the Act of March 1, 1972 (86 Stat. 44) which establishes the Buffalo National River, is amended by deleting "For development of the national river, there are authorized to be appropriated not more than \$283,000 in fiscal year 1974; \$2,923,000 in fiscal year 1975; \$3,643,000 in fiscal year 1976; \$1,262,000 in fiscal year 1977; and \$1,260,000 in fiscal year 1978. The sums appropriated each year shall remain available until expended." and inserting in lieu thereof "For development of the national river, there are authorized to be appropriated not to exceed \$9,371,000".

\* \* \* \* \*

Approved October 21, 1976.

### TITLE II—ACQUISITION CEILING INCREASES

SEC. 201. The limitations on appropriations for the acquisition of lands and interests therein within certain units of the National Park System are amended as follows:

\* \* \* \* \*

(2) Buffalo National River, Arkansas: Section 7 of the Act of March 1, 1972 (86 Stat. 44), is amended by changing "\$30,071,500" to "\$39,948,000".

\* \* \* \* \*

## TITLE IV—WILDERNESS

SEC. 401. The following lands are hereby designated as wilderness in accordance with section 3(c) Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c), and shall be administered by the Secretary in accordance with applicable provisions of the Wilderness Act:

\* \* \* \* \*

(1) Buffalo National River, Arkansas, wilderness comprising approximately ten thousand five hundred and twenty-nine acres and potential wilderness additions comprising approximately twenty-five thousand four hundred and seventy-one acres depicted on a map, entitled "Wilderness Plan, Buffalo National River, Arkansas", numbered 173-20,036-B and dated March 1975, to be known as the Buffalo National River Wilderness.

SEC. 402. A map and description of the boundaries of the areas designated in this title shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of the Interior, and in the Office of the Superintendent of each area designated in this title. As soon as practicable after this Act takes effect, maps of the wilderness areas and descriptions of their boundaries shall be filed with the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the United States Senate, and such maps and descriptions shall have the same force and effect as if included in this Act: *Provided*, That correction of clerical and typographical errors in such maps and descriptions may be made.

SEC. 403. Any lands which represent potential wilderness additions in this title, upon publication in the Federal Register of a notice by the Secretary that all uses thereon prohibited by the Wilderness Act have ceased, shall thereby be designated wilderness. Lands designated as potential wilderness additions shall be managed by the Secretary insofar as practicable as wilderness until such time as said lands are designated as wilderness.

SEC. 404. The areas designated by this Act as wilderness shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act governing areas designated by that Act as wilderness, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act, and, where appropriate, any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

\* \* \* \* \*

Approved November 10, 1978.



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## APPENDIX F

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